

# THE EFFECT OF DIGITAL VIDEO GAMES ON EFL STUDENTS' LANGUAGE LEARNING MOTIVATION

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## Abstract

The study examined the effect of a commercial digital video game on high school students' language learning motivation. Participants were 241 male students randomly assigned to one of the following three treatments: Readers, who intensively read the game's story; Players, who played the digital video game; and Watchers, who watched two classmates play the digital video game. A language learning motivation scale was given to the participants as a pre- and post-test. Also, field notes were taken. Results indicated a significant language learning motivation increase over time. Only the Watchers, however, showed significantly higher motivation than the Readers in the end. Thus, the use of commercial digital video games can help enhance high school students' language learning motivation.

**Keywords:** digital video game; language learning motivation; game-based language learning

## 1. Introduction

### 1.1. Game-based and game-enhanced language learning

Digital Video Games (DVGs) have become a big industry with sales of over billions of dollars (Newzoo, 2015; Pham, 2009). It is estimated that the international industry will hit \$113 billion by 2017, not to mention that there is a rapid growth in Asian markets (Newzoo, 2014). With over 1,909,447,000 gamers worldwide (Newzoo, 2015), DVGs affect the way people socialize, communicate, play, and learn, leading educators to investigate them as language learning instruments (Rama, Black, Van Es, & Warschauer, 2012).

Game-based learning is defined as "any initiative that combines or mixes video games and education" (Tsai & Fan, 2013, p. 115) with a game being "a system in which players engage in an artificial conflict, defined by rules, which results in a quantifiable outcome" (Salen & Zimmerman, 2004, p. 93). Reinhardt and Sykes (2012) conceptualized language learning through DVGs to involve two forms, namely, game-based and game-enhanced. The former involves using educational games-DVGs that focus on the direct representation of educational materials (Kiili & Perttula, 2013). The latter refers to using commercial-off-the-

shelf DVGs in educational settings. The primary goal of a commercial DVG is winning the match rather than learning a language, in this case English. English does play a secondary role when gamers are to obtain, create, use, or manipulate their items. It also comes into play if gamers are to understand their quests or effectively communicate with one another. Thus, English becomes a means to a greater end.

For example, gamers observe items with thumbnails, descriptions, and effects which help them learn English vocabulary. This conforms to Gee's (2007) third learning principle called the 'semiotic principle', which explains the relationship existent among several sign systems (e.g., images, color codes, words, etc.) employed in a DVG. Understanding these relationships greatly improves learning through DVGs. On the whole, Gee (2007) identified 36 learning principles at work in what he called *good games* (i.e., games that employ most or all of the principles).

Informal language learning instruments such as DVGs and movies have been found to result in higher learning outcomes compared to classroom practice (Cole & Vanderplank, 2016). Previous studies (e.g., Ebrahimzadeh, 2016, 2017; Ebrahimzadeh & Alavi, 2016) have examined DVGs in formal educational contexts indicating encouraging results. These researchers provide further evidence that the common formal classroom practice might not still be fit to be considered the prevalent language learning context (Sockett, 2014). Still, the classroom plays a crucial role and could benefit from informal language learning instruments (Cole & Vanderplank, 2016; Collins & Muñoz, 2016). Nation (2001) reasoned that to select a DVG as a form of software with higher vocabulary learning outcomes it should provide vocabulary learning conditions, namely, noticing, retrieval, and generative use. Noticing can be harnessed through colorization, text stylization, highlighting, etc. Retrieval can be achieved through the use and repeated use of vocabulary to acquire some other item. Generative use, finally, pertains to the presentation of vocabulary in different forms such as written, spoken, and pictorial.

## **1.2. The importance of motivation in language learning**

Motivation is an important, pervasive behavior determinant (Schunk, Meece, & Pintrich, 2013) of students, teachers and administrators (Elliot & Covington, 2001). Research has shown that motivation affects human behavior in the "choice of a particular action, the persistence with it and the effort expended on it" (Dörnyei, Csizér, & Németh, 2006, p. 9). Language Learning Motivation (LLM) theories have undergone dramatic changes since first introduced. Dörnyei and Ushioda (2011) have categorized them into three phases: the social

psychological period (1959-1990), the cognitive-situated period (1990s), and the process-oriented period (turn of the 20<sup>th</sup> century).

The first phase highlights the importance of language learners' attitudes toward the target language and language community. It includes several factors such as interest in foreign countries, instrumental motivation, and anxiety, to name just a few. The second phase coordinates motivation research with the cognitive revolution in psychology focusing on situated analysis of motivation (e.g., in the classroom). The third phase conceptualizes motivation as a process occurring over time. These two approaches, however, are criticized mainly on two fronts. Firstly, motivation is considered here as a linear phenomenon while it seems to be the result of a series of complex interactions. Secondly, theories presented during these two phases follow a reductionist approach toward motivation by defining a set of variables as significant contributors to motivation.

As recently proposed, the socio-dynamic phase seeks to remedy these criticisms. It considers "the situated complexity of the L2 motivation process and its organic development in dynamic interaction with a multiplicity of internal, social and contextual factors" and aims at taking "account of the broader complexities of language learning and use in the modern globalised world" (Dörnyei & Ushioda, 2011, p. 72). For example, it is understood after Vygotsky (1978) that individuals have an active participatory role in construction of motivational goals and also in what they internalize as a result (Dörnyei & Ushioda, 2011). Therefore, while the context shapes an individual's level of motivation, it is itself formed by standards of the individual(s) participating to define it.

## **2. Theoretical background to the present research**

### **2.1. Digital Video Games (DVGs) and language learning motivation (LLM)**

It has been indicated that since many learners automatically assume educational games to be boring (Kinzie & Joseph, 2008), identifying and selecting a suitable commercial DVG may improve students' motivation (Dickey, 2011; Wu, Chiou, Kao, Hu, & Huang, 2012). There are six activity modes that appear to best reflect junior high school students' game-play preferences including active, explorative, problem-solving, strategic, social, and creative activities (Kinzie & Joseph, 2008). According to the authors, commercial DVGs are richer in said activities than educational DVGs. Thus, they propose that educational games be enriched with such activities in order to lessen the strength of the 'boring' label that children attach to them.

A language learning software may provide substantial exposure to the content but fail to affect change since it does not motivate learner participation (Bodnar, Cucchiarini, Strik, & Van Hout, 2016). Since participation is closely related to motivation (Dörnyei & Ushioda, 2011), it becomes important to use a variety of instruments to help engage more learners. To this end, although the focus of their studies has not been particularly on LLM, researchers such as Gee (2007), Molins-Ruano et al. (2014), Schrader, Lawless, and Deniz (2010), and Van Eck (2009) have suggested the implementation of commercial DVGs in educational settings because of their abundance of motivational elements. DVGs may increase intrinsic and/or extrinsic motivation for replays (Kuo & Chuang, 2016), which are viewed as processes that ultimately result in acquisition and mastery of new knowledge (e.g., a second language) (Buckley and Anderson, 2006).

For language learning purposes, it is important to select a commercial DVG in which language plays a role in achieving the ultimate goal of the game, in victory, so that while enjoying playing the DVG gamers would be involved with language processing as well (Rosas et al., 2003). Also, while educational DVGs pay strict attention to the content, commercial DVGs focus on aesthetic elements (e.g., audiovisual features) that help the product sell in the market. Thus, an ideal game would be one which integrates these features to create an outcome appealing both in terms of content and appearance.

Malone and Lepper were the first to study motivation in educational games (as cited in Tzeng, 1999). They identified four factors including challenge, curiosity, control, and fantasy, constituting building blocks of intrinsic motivation in games. Malone and Lepper maintained that the challenge a game presents should be kept within the learners' abilities – their zone of proximal development (Vygotsky, 1978) – to avoid frustration, anxiety, and boredom (see also Csikszentmihalyi, 1991; Kiili, De Freitas, Arnab, & Lainema, 2012). Curiosity could be raised by means of audio-visual or sensory stimuli or appealing game-stories. Control refers to the idea that learners playing a game should feel a sense of control over it and understand that it is actually their actions and decisions which mould the outcomes. Lastly, fantasy should be present so that learners experience states, conditions, situations, jobs, etc. not currently present. For example, they could be a footballer, manager, warrior, etc. which in reality might not be possible – at least in the near future.

A study by Connolly, Stansfield, and Hainey (2011) evaluated the effects of an alternate reality game on motivation of secondary school students for learning modern foreign languages across different European countries. Ninety-five language teachers and 328 students from 17 countries participated in the study. Students played the DVG at home or in

the classroom for 10 days. Data collection involved a pre-test-post-test design (online administration). Results showed that the DVG raised the students' motivation and participants believed that the DVG provided them with skills regarding cooperation, collaboration, and teamwork. The DVG also offered opportunities for engagement with peers from different language backgrounds across different countries. The study concluded that gaming helps motivate students for second language learning and can be used as a means to move beyond the constraints of traditional classrooms.

Another study by Hanus and Fox (2015) aimed at measuring the effect of gamification on university students' motivation in a longitudinal perspective. The researchers administered two treatments and the gamified treatment involved a leaderboard and badges whereas the other treatment did not. Students were evaluated based on four measures distributed during the 16 weeks of the study. Results indicated less motivation among students who underwent gamified instruction.

A study by Cole and Vanderplank (2016) compared a group of autonomous (out-of-class) language learners with in-class learners, confronting an informal learning condition was compared against a formal learning environment. They concluded that learning a second language outside the classroom through informal means would result in superior outcomes regarding advanced learners. According to Cole and Vanderplank (2016), fossilization was observed among in-class learners but not autonomous learners. The researchers identified self-determined instrumental motivation as an important force helping autonomous learners achieve better results.

## **2.2. The role of teamwork in language learning, enhancing motivation and implementation of DVGs**

Teamwork is a dimension added to an individual's consideration of success and failure (Newman, 1980). If members find their individual contribution to the team essential, they may have higher expectations of success in similar future situations. They might also feel less debilitated by failure in a group. Teamwork provides an opportunity for members to share their experiences for self-evaluation purposes and encourages effective social comparisons through interactions, collaboration and cooperation (Kessler, 1992; Oxford, 1997).

For example, a group of students working on a text could share their ideas, correct each other's mistakes or assign roles to speed up the process of evaluating the text (e.g., each member doing a different pre- or post-reading exercise and then sharing the results). Being recognized as effective second language learning practice, teamwork has been employed in a

number of language learning methods and teaching practices of the post-method era (Richards & Rodgers, 2001). For example, teamwork results in better second language vocabulary learning (Dobao, 2014).

Teamwork has also been shown to enhance LLM (Dörnyei, 1994, 1997). Dörnyei (1994) presented a model of LLM with group-related components, namely, classroom goal structures, group cohesion, goal-orientedness, and the norm and reward system. Put together, student collaboration results in superior learning gains since it can “generate a powerful motivational system to energise learning” (Dörnyei & Ushioda, 2011, pp. 27-28).

Multiplayer DVGs such as *League of Legends* (Riot Games, 2009) and *Defense of the Ancients* (IceFrog, 2015) tend to specify a role for each avatar. Through teamwork, these avatars can easily win the game. Understanding how these roles work is based on knowing the avatars and items they need which comes from first-hand experience, item/ability thumbnails, the provided guidelines, and the language used to describe these items/abilities/avatars. Thus, DVGs provide a suitable environment to promote teamwork (Connolly et al., 2011; Vegt, Visch, de Ridder, & Vermeeren, 2015).

### **3. The study**

#### **3.1. Focus and questions of the research**

Motivation is a determining factor in successful second/foreign language learning since it provides the initial will and the driving force to stand the effortful process of learning another language (Dörnyei, 1994, 1998). Findings of the research on motivational effects of game-based learning are very limited (Girard, Ecalle, & Magnant, 2013; Tsai & Fan, 2013), and there is a lack of sufficient empirical evidence to encourage or discourage their use as educational instruments (Connolly, Boyle, MacArthur, Hainey, & Boyle, 2012). Additionally, Cole and Vanderplank (2016) conclude that a most important need in investigating informal educational instruments is how they work when implemented in formal contexts such as high schools.

For example, Hoffman and Nadelson (2010) conclude that motivational engagement resulting from recreational gaming is unlikely to transfer to educational settings since classrooms are competitive and evaluative. They define motivational engagement as individuals' conscious and willing approach toward a task to pursue a specific goal based on their interests, values, and affect. Accordingly, gamers play to fulfill recreational, social, and esteem needs without focusing much on knowledge improvement. Therefore, the change of

objective enforced by classroom-context would render the motivational engagement of DVGs null and void.

Iran is a country where the use of technology in education is in its early stages. Only a limited number of high schools have access to a computer lab and those that do mainly use it for teaching computer science. Therefore, game-enhanced language learning is not common in Iranian high schools. The present study, thus, sought to evaluate students' LLM resulting from the implementation of a commercial DVG in high school classrooms. The following research questions were put forward:

1. How does a commercial DVG affect high school EFL students' LLM?
2. How does playing individually affect LLM as compared to watching others play the DVG?

### **3.2. Participants**

A total of 241 male Iranian high school students (aged 12-18) were selected through cluster sampling from one junior and two senior high schools. These students did not know anything about game-enhanced language learning. The majority only studied English at high school but some attended private language institutes as well. Based on the *Headway* placement test published by Oxford University Press in 2012, the majority of students (87.9 %) were categorized as A1 level according to guidelines of *The Common European Framework of Reference*. Twenty-seven students were removed from the study because they had either played the game at home, cheated during the exams, or missed more than one session.

Before starting the study, it was reviewed and approved by the research ethics committee of Shiraz University. Also, authorities in the Ministry of Education were contacted and written permission was obtained. Furthermore, participation was voluntarily. In each class, those who did not show consent to participate in the study were given handouts on their textbook material to practice.

As noted earlier, unfortunately, many high schools in Iran lack access to a computer lab. For this reason, the study was designed in a way to accommodate the lack of equipment by having the Players (those who personally played the game) and Watchers (those who watched the game being played) treatments.



### 3.3. Materials and instruments

#### 3.3.1. Target vocabulary items

Twenty-one words (Appendix 1.1) were selected from the DVG *Defense of the Ancients* (IceFrog, 2015). They were unknown to the students as indicated through the pre-test. The test (Appendix 1.2) included 21 multiple choice items with four alternatives. Target vocabulary items were selected based on the criteria of time, avatars, and item association.

Regarding time, the target vocabulary items that Players were to obtain during a match had to require as few gold pieces (DVG's currency) as possible so that students could make enough money to buy them all during the given class time. They could make money by completing the objectives, killing enemies, or capturing certain locations. As regards the avatars, *Defense of the Ancients* (IceFrog, 2015) has 112 avatars categorized in three classes emphasizing different skills and play styles. An attempt was made to select the target vocabulary from among items usable by all three classes. Item association refers to certain vocabulary items that could be combined to create new and stronger items. The order by which these items were presented was mainly dictated by the DVG. The names of these items were used as the target vocabulary items to be presented through reading passages and the DVG.

#### 3.3.2. Readings and worksheets

Five reading passages (Appendix 2), each consisting of 600-650 words, were written by the researchers to teach the target vocabulary items to Readers. They were based on the DVG's plot as excerpts telling the story. All passages were developed based on the Flyers' stage of the Cambridge English Readers syllabus (Cambridge English Language Assessment, 2013). Moreover, *The Common European Framework of Reference's* A2 level was used in this study to keep the passages one level higher than the participants' proficiency level conforming to Krashen's (1982)  $i+1$  Comprehensible Input hypothesis.

To prepare the readings, a word-list was developed according to the headwords introduced by the Cambridge English Language Assessment (2013) syllabus (the Flyers stage which conforms to the A2 level), based on which all passages were written. Using this word-list and a software called *Range* (Nation, 2002), all five readings were examined and analyzed for appropriateness. The software provided statistics on tokens, types, and word families. These statistics were compared against the Cambridge word-list by the software. Based on this information, the texts were edited several times to achieve the desired statistics (e.g.,



controlling the number of words not included in the Cambridge word-list). The readings were then developed into worksheets with pre- and post-reading activities. Simplified English definitions were added in the right margin.

### **3.3.3. The motivation scale**

To assess LLM, the scale by Carreira (2006) (see Appendix 3) was used which focuses on two dimensions of motivation for language learning: intrinsic and extrinsic. The former refers to doing something for its own sake, while the latter refers to doing something for the sake of achieving something else. This scale was originally made for children of similar age as the participants of the present study. It includes five factors (19 items), all answered on a four-point Likert type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The scale was administered twice as a pre-test and a post-test (Cronbach's  $\alpha = .66$  and  $.68$  respectively). It should be noted that scores on the anxiety subscale (three items) were reversed as they were originally negatively coded. A Persian version of the questionnaire prepared through back-translation procedures was given to the students.

### **3.3.4. The digital video game**

*Warcraft III: The Frozen Throne* (Blizzard, 2003) is a Real-Time Strategy DVG, in which gamers use their units, structures, and resources to secure some areas of the map and/or destroy enemy assets (Rollings & Adams, 2003). This DVG was chosen based on the learning opportunities it offered, suitability, and technical implementation criteria (hardware, software, and game-play training requirements). According to Entertainment Software Rating Board and Pan European Game Information, the selected game is suitable for users of 12 years old and above. Additionally, according to ign.com and gamefaqs.com, the game enjoys a high popularity score (9 out of 10 and 88 out of 100 respectively).

Considering the learning opportunities, each vocabulary item had a thumbnail (a static image). Avatars' attributes such as damage, armor, strength, agility, and intelligence were affected by these items indicating their use or purpose. Also, the teacher occasionally asked leading questions. Students could buy these items and carry them around in their inventory; they could reexamine these items at will (hovering over them would prompt their features in a floating window). Finally, considering the above, students decided on Persian equivalents for the items. In other words, based on Nunan's (1999) Presentation-Practice-Production model, the items were first introduced by the game (presenting the items through textual and pictorial

means); next, students practised with them (examining or using them); and then, they combined them to produce superior items.

### **3.3.5. DVG pictures, cinematics, and cutscenes**

Each worksheet included a number of relevant pictures from the DVG to help students visualize the items. These pictures were also used for the Players and Watchers with minor modifications such as highlighted areas to illustrate the steps for obtaining them (projected on a screen as slides). The pictures were shown on-demand to avoid anxiety resulting from lack of information. A cinematic and/or cutscene with Persian subtitles was also played for all the students at the beginning of each session to visually present a part of the story (projected on a screen). The Readers read that part in their worksheets afterward. For the Players and Watchers, the videos aimed at raising a sense of awareness and purpose.

### **3.3.6. Field notes**

Both during and immediately after each session, notes were made of significant events, expressions, and student reactions such as distracting factors, comments, and interactions. These notes did not follow a pre-defined order but rather served as qualitative data to be used for triangulation purposes.

## **3.4. Procedure**

Through random assignment, the seniors ( $N = 153$ ) were designated to one of the three treatments, namely, Readers ( $N = 75$ ), Players ( $N = 65$ ), and Watchers ( $N = 74$ ). For the juniors ( $N = 61$ ), however, the choice was limited to either the Players' or Watchers' treatment because they did not qualify for language requirements set by the Cambridge English Language Assessment (2013) syllabus which was used as the base for developing the Readers' worksheets.

The proficiency test, the motivation scale, and the vocabulary pre-test were administered two weeks before the study. Then, the study went on for five consecutive sessions, one session a week, each lasting for about 50 minutes. During each session, 3-6 vocabulary items were introduced through the following treatments (if more items were included, they could not be repeated enough times in the Readers' worksheets). Finally, students took the motivation post-test a week after the study.

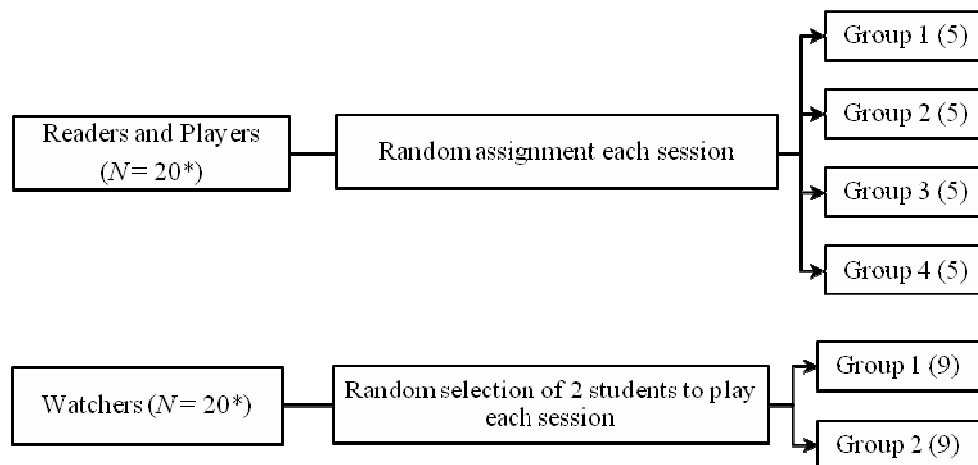
### **3.4.1. The Readers' treatment**

During each session the Readers studied a worksheet (pen-and-paper) that included a reading passage with pre- and post-reading activities in English. Only in one post-reading activity, summary writing, were students allowed to use Persian since they were not proficient enough to carry out this task solely in English. First, they watched a video from the DVG that depicted the part of story they were going to read about. Next, each passage was read aloud in the classroom and translated into Persian. While reading, students were asked to try to guess the meaning of unknown words. Then, post-reading activities including multiple-choice, comprehension check, fill-in-the-blanks, matching exercises, summary writing, and a word puzzle were worked on in groups of four or five of students to complete these tasks. Group members in each classroom were randomized each session to prevent ordering effects.

### **3.4.2. The Players' and Watchers' treatment**

These students received instruction in how to play the DVG prior to the treatment. During each session they watched a video from the DVG and information on the characters' whereabouts was explained to them. This was done to raise a sense of purpose and awareness. Through an overhead projector, each vocabulary item and instructions on how to find it in the game were illustrated on-demand. Students then played the game trying to obtain the target vocabulary items. Since the ultimate goal was to destroy the enemy base, students had to improve their avatars in terms of damage, strength, agility, armor, intelligence, hitpoints, and mana, all made possible by purchasing the items. To buy these items, students had to make money by killing enemies. They had to pay attention to their avatar's attributes (damage, armor, strength, hitpoints, mana, intelligence, and agility) since they were affected by each item they bought. This helped them guess the meanings.

The Players worked in teams of four or five (depending on the number of students in each class). Team members were randomized during each session to avoid ordering effects. The Watchers, however, only had two students playing and others were divided into two groups providing hints and encouragement for their player (Figure 1). Each team tried to destroy the enemy base and members had to interact to choose a plan of action. They also asked for guidance from both their teammates and the teacher on how to create certain items or where to locate them. Depending on the team members' skills and avatars, each game lasted for about 35 minutes.



\*This total number is just for simplifying the description since each class differed regarding its total number of students.

Figure 1. Grouping of students in different treatments

Teams discussed and decided, with help from the teacher, on a Persian equivalent for each item during and at the end of each session. Leading questions were asked to help them guess the meanings only when a) the item thumbnails were not informative enough or b) students disagreed on the meaning.

### 3.5. Data analysis

Data analysis was done using SPSS v. 21. To lessen the effects of cooperative learning, which can violate the ANOVA assumption of having independent observations, and to improve the validity of the findings, a more stringent alpha level ( $p = .01$ ) was used (Stevens, 2009). Pre-test-post-test scores of the motivation scale underwent a mixed between-within subjects ANOVA to see if the three groups differed in terms of their LLM and also to examine the effect of time on students' LLM. The conventions set by Cohen (1988) were used for interpreting the effect sizes. Field notes were viewed, reviewed, categorized, and analyzed to provide an understanding of the participants and instruments.

## 4. Results and discussion

### 4.1. Preliminary analyses

A one-way between-groups ANOVA (Table 1) was run on the motivation pre-test scores which showed that the three groups (Readers:  $N = 73$ ,  $M = 2.93$ ,  $SD = .35$ ; Players:  $N = 65$ ,  $M$

= 3.01,  $SD = .37$ ; Watchers:  $N = 74$ ,  $M = 3.09$ ,  $SD = .33$ ) had no statistically significant difference in the beginning of the study ( $p = .021$ ).

Table 1. Examining homogeneity in the motivation pretest scores

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.961	2	.480	3.954	.021
Within Groups	25.395	209	.122		
Total	26.356	211			

Table 2 presents the descriptive statistics of the scores each treatment yielded for the motivation pre- and post-test. As shown, all groups displayed an increase in the mean score from pre-test to post-test. The Players and Watchers showed almost similar increase (about .14). The Readers' mean score, however, showed the smallest increase (about .05). In sum, game-learners showed more increase in motivation scores than the pencil-and-paper learners throughout the study.

Table 2: Descriptive statistics of the motivation pre- and post-test scores

Variable	Group Name	N	Min	Max	Mean	Std. Deviation
Pre-test	Readers	71	1.95	3.69	2.9377	.34914
	Players	63	1.99	3.71	3.0108	.36836
	Watchers	73	2.37	3.71	3.0932	.33494
Post-test	Readers	71	1.93	3.82	2.9871	.38207
	Players	63	2.47	3.81	3.1577	.34056
	Watchers	73	2.35	4.00	3.2290	.41692

#### 4.2. Results of inferential processing

To answer the first question of this study which asked how DVGs affect high school EFL students' LLM, a mixed between-within subjects ANOVA was run on pre-test and post-test scores of the motivation scale. Results of the analysis (Table 3) demonstrated a statistically significant effect ( $p = .000$ ) for time with a medium-large effect size (partial eta squared = .086). In sum, the students' LLM significantly increased throughout the study.

Table 3: The effect of time<sup>a</sup> on motivation

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial eta squared
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Time	Wilks'	.914	19.202 <sup>b</sup>	1.000	204.000	.000	.086
Lambda							

a. Design: Intercept + group

Within subjects design: Time

b. Exact statistic

As for the between groups' effects (Table 4), a significant statistical difference ( $p = .001$ ) with a medium effect size (partial eta squared = .065) was observed. In other words, there was a significant difference between the three treatments.

Table 4: Effect of time on motivation between the three groups

Source	Type III sum of squares	df	Mean square	F	Sig.	Partial eta squared
Intercept	3884.068	1	3884.068	19080.668	.000	.989
Group	2.881	2	1.440	7.076	.001	.065
Error	41.526	204	.204			

Post-hoc Tukey HSD tests (Table 5) were run to find out which groups differed. As shown, the Readers and Watchers were found to be significantly different ( $p = .001$ ). There was no significant difference between the Players and Readers ( $p = .072$ ). As regards the second question, no significant difference was observed between the Players and Watchers ( $p = .342$ ).

Table 5: Post-hoc analysis of the difference between the three groups

(I) Group name	(J) Group name	Mean difference (I-J)	Std. error	Sig.
Readers	Players	-.1218	.05522	.072
	Watchers	-.1987*	.05318	.001
Players	Readers	.1218	.05522	.072
	Watchers	-.0768	.05486	.342
Watchers	Readers	.1987*	.05318	.001
	Players	.0768	.05486	.342

Based on observed means.

The error term is Mean Square (Error) = .102.

\*. The mean difference is significant at the .01 level.

### **4.3. Discussion**

Results showed a significant LLM increase throughout the study. However, only the Watchers showed a significantly higher mean than the Readers in the end. There was no other significant difference between the treatments. The results agree with previous studies in that the use of DVGs can increase LLM (e.g., Connolly et al., 2011; Wehner, Gump, & Downey, 2011). However, most of the previous studies used educational rather than commercial DVGs. The study also agrees with Cole and Vanderplank's (2016) speculation that informal learning instruments such as DVGs could be beneficial to formal learning contexts by motivating the learners. This indication supports Tragant, Muñoz, and Spada's (2016) finding that solely teacher-led instruction may not be the optimum practice. The increase in motivation could be attributed to higher outcomes observed among game learners, as reported by Ebrahimzadeh (2016, 2017).

The results of the present study contradict those of Hanus and Fox (2015), who found less motivation among the students who underwent gamified instruction. The findings also differ from those of Hoffman and Nadelson (2010), who concluded that the DVGs' motivational engagement could not be transferred to educational settings. It should be noted, however, that previous studies have mainly focused on educational DVGs, not commercial ones. On the contrary, the present study used a commercial DVG in which language learning was not the primary purpose. Since commercial DVGs tend to be richer in terms of aesthetic features (e.g., better graphics, audiovisual effects, compelling stories), they may have some advantage over educational DVGs when it comes to enhancing motivation. This notion, however, is in need of further investigation.

Similarly to Hoffman and Nadelson (2010), the participants of the present study perceived the game-mediated language learning environment as comfortable and relaxing and experienced the freedom they had never had in a formal classroom (e.g., freely talking to their classmates without asking for the teacher's permission), and comments such as 'please tell other teachers to teach like this' were heard frequently. Also, since the second half of the class time was allocated to the treatments, students would try to remind the teacher by saying 'sir, we will not have enough time if we don't start now.'

Multimedia presentation allowed for inclusion of several instruments such as a DVG, videos, pictures, and texts. This provided a more comprehensive ground for students to cultivate their interests and engage in activities (Clark & Mayer, 2011). Curiosity – a situation in which “the learner knows enough to have expectations about what will happen, but where these expectations are sometimes unmet” (Malone, 1980, p. 60) – induced from the videos



was notable in motivating participation. Some students would volunteer to predict what would happen next week. Sometimes, they even stayed longer to discuss the DVG after the class. Therefore, the game seems to have enhanced motivation since active participation is a sign of motivation (Dörnyei & Ushioda, 2011).

A group of students who were strongly against the content at the beginning underwent a change of heart after the third or fourth session and became interested. This might be attributed to the DVGs' potential to change one's mood (Park, 2007). A few students mentioned that although they enjoyed the method, they preferred some other content. Readers and Players were more salient about their interests and presented ideas on alternative stories and/or DVGs. Watchers, however, were less concerned with it when pointing out their topics of interest, probably because they did not have to play or participate in a game they might not have liked very much. This could be an important point giving an edge to the Watchers in the end. Also, it highlights the importance of interest when engaging learners in such activities.

The Watchers may have experienced a more relaxed treatment from a cultural point of view as well. In the Iranian culture, modesty is encouraged and individuals are advised to refrain from being ostentatious. This can be discussed based on the study of national culture (Hofstede, 2011; Hofstede, Hofstede, & Minkov, 2010). Hofstede (2011) termed a national dimension of culture as 'Indulgence' versus 'Restraint'. An indulgent society "allows relatively free gratification of basic and natural human desires related to enjoying life and having fun" whereas a restraint society "controls gratification of needs and regulates it by means of strict social norms" (Hofstede, 2011, p. 15). As results of the present study suggest and also noted in Hofstede's (2011) categorization, Iran has a restraint society. The Watchers' treatment allowed participation but in a more subtle way where an individual would not be the center of attention, and participation or the lack of it was not judged. In other words, participation would not require frequent display or gratification of thoughts and emotions. Being more relaxed, therefore, the Watchers may have had more fun and may have been happier considering their cultural norms.

LLM and engagement did not appear to be exclusively dependent on the win/lose outcomes, which agrees with the findings of Hoffman and Nadelson (2010). Although winners appeared more energetic and happier, losers were not discouraged to play the next week. While losing or bad performance did result in instant psychological and physical reactions such as anger, discouragement, sadness, regret, and yelling, the condition was not strong enough to prevent them from participation the next week.

Students' LLM showed in their comments too. Many of them had bragged about going to an English class where they played games. They reported that their friends envied them saying, 'good for you' or, 'I wish I could come to your class too.' Parents, however, responded inconsistently commenting that 'whatever your teacher decides' or 'oh no; so games made their way into school too.' An interesting point was that some students said that they tried to defend the DVG course when their parents were against it. 'I told my mother I'm learning and she said I hope so', as expressed by one student.

## **5. Conclusion**

The study investigated the effect of a commercial DVG on EFL students' LLM. Results indicated a significant change in motivation over time. However, only the Watchers showed a significantly higher score than the Readers in the end. Accordingly, it is suggested that DVGs can enhance LLM in high schools. Furthermore, the present study found that motivational engagement experienced through DVGs will transfer to educational settings meaning that using a DVG in the classroom positively affects student motivation. Altogether, the following points can be highlighted.

Firstly, some students had certain suggestions about which DVG(s) should have been used. Thus, it is suggested that student interest should be considered in DVG selection as far as being viable. This can be attributed to the unique feature of DVGs: students think they should have a say in DVG selection/use since they are familiar with them (many of them are gamers). Secondly, students should have the freedom whether to play or just watch the DVG (especially if only a single DVG is to be used) as some of them might not like the DVG itself but enjoy the comfortable environment and experience less anxiety, which seems to enhance LLM. Moreover, especially pertaining to the Iranian context, students seem to have liked the Watchers' treatment better probably since it gave them the chance to selectively participate or remain passive learners. Thirdly, DVGs should be used as a complementary activity not a replacement for textbooks since excessively using them would divert the original purpose (Reinhardt & Sykes, 2012). Fourthly, although the Readers did not play the game, it seems that the change of atmosphere through watching DVG videos, reading a DVG story, and working on activities targeting that story as a team improved their LLM though not as much as the Players and Watchers.

Lastly, this study was limited in certain ways. Basically, self-report measures face a potential problem of validity as they are highly sensitive to the respondents' comprehension and willingness to provide honest answers. Additionally, Hawthorne effect might have been

present as all groups knew they were taking part in a research project (Ary, Jacobs, Sorensen, & Razavieh, 2010). Moreover, an important ANOVA assumption (independence of observations) could not be met. Furthermore, since the target vocabulary items had to be repeated enough times each session in the Readers' treatment, no more vocabulary items could be included, which weakens the pedagogical value of the findings. Also, the target vocabulary may not have been immediately useful to the school context. In addition, since it was not possible to know how long a match would last, the time allocated to each session could not be exactly specified. Next, due to educational policies in Iran, female students could not be included. Lastly, since the classroom use of DVGs was new to the participants, part of the increase in motivation might have been due to the excitement of having a DVG in the classroom.

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### References

- Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). *Introduction to Research in Education* (8th ed.). Belmont, CA: Cengage Learning.
- Blizzard. (2003). *Warcraft III: The Frozen Throne* [Computer software]. USA: Blizzard Entertainment. Retrieved from <http://eu.blizzard.com/en-gb/games/war3/>
- Bodnar, S., Cucchiaroni, C., Strik, H., & Van Hout, R. (2016). Evaluating the motivational impact of CALL systems: Current practices and future directions. *Computer Assisted Language Learning*, 29(1), 186-212.
- Buckley, K. E., & Anderson, C. A. (2006). A theoretical model of the effects and consequences of playing video games. In P. Vorderer & J. Bryant (eds.), *Playing Video Games: Motives, Responses, and Consequences* (pp. 363-378). Mahwah, NJ: Lawrence Erlbaum.
- Cambridge English Language Assessment. (2013). *Cambridge Young Learners English (YLE)*. Cambridge: Association of Language Testers in Europe.
- Carreira, J. M. (2006). Motivation for learning English as a foreign language in Japanese elementary schools. *Japan Association for Language Teaching*, 28(2), 135-157.
- Clark, R. C., & Mayer, R. E. (2011). *E-Learning and the Science of Instruction Proven Guidelines for Consumers and Designers of Multimedia Learning* (3rd ed.). San Francisco, CA: Pfeiffer.
- Cohen, J. W. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Cole, J., & Vanderplank, R. (2016). Comparing autonomous and class-based learners in Brazil: Evidence for the present-day advantages of informal, out-of-class learning. *System*, 61, 31-42.

- Collins, L., & Muñoz, C. (2016). The foreign language classroom: Current perspectives and future considerations. *The Modern Language Journal*, 100(1), 133-147.
- Connolly, T. M., Boyle, E. A., MacArthur, E., Hainey, T., & Boyle, J. M. (2012). A systematic literature review of empirical evidence on computer games and serious games. *Computers & Education*, 59(2), 661-686.
- Connolly, T. M., Stansfield, M., & Hainey, T. (2011). An alternate reality game for language learning: ARGuing for multilingual motivation. *Computers & Education*, 57(1), 1389-1415.
- Csikszentmihalyi, M. (1991). *Flow: The Psychology of Optimal Experience*. New York, NY: Harper Perennial.
- Dickey, M. D. (2011). Murder on Grimm Isle: The impact of game narrative design in an educational game-based learning environment. *British Journal of Educational Technology*, 42(3), 456-469.
- Dobao, A. F. (2014). Vocabulary learning in collaborative tasks: A comparison of pair and small group work. *Language Teaching Research*, 18(4), 497-520.
- Dörnyei, Z. (1994). Motivation and motivating in the foreign language classroom. *The Modern Language Journal*, 78(3), 273-284.
- Dörnyei, Z. (1997). Psychological processes in cooperative language learning: Group dynamics and motivation. *The Modern Language Journal*, 81(4), 482-493.
- Dörnyei, Z. (1998). Motivation in second and foreign language learning. *Language Teaching*, 31(3), 117-135.
- Dörnyei, Z., Csizér, K., & Németh, N. (2006). *Motivation, Language Attitudes and Globalisation: A Hungarian Perspective*. Clevedon: Multilingual Matters.
- Dörnyei, Z., & Ushioda, E. (2011). *Teaching and Researching Motivation* (2nd ed.). Harlow: Pearson Education.
- Ebrahimzadeh, M. (2016). *Digital Video Games and Second Language Acquisition: Promoting Vocabulary Learning and Motivation of EFL Students*. Saarland: LAMBERT Academic Publishing.
- Ebrahimzadeh, M. (2017). Readers, Players, and Watchers: EFL students' vocabulary acquisition through digital video games. *English Language Teaching*, 10(2), 1-18.
- Ebrahimzadeh, M., & Alavi, S. (2016). Motivating EFL students: E-learning enjoyment as a predictor of vocabulary learning through digital video games. *Cogent Education*, 3(1), 1-14.
- Elliot, A. J., & Covington, M. V. (2001). Approach and avoidance motivation. *Educational Psychology Review*, 13(2), 73-92.
- Gee, J. P. (2007). *What Video Games Have to Teach us about Learning and Literacy* (2nd ed.). New York, NY: St. Martin's Press.
- Girard, C., Ecalle, J., & Magnan, A. (2013). Serious games as new educational tools: How effective are they? A meta-analysis of recent studies. *Journal of Computer Assisted Learning*, 29(3), 207-219.
- Hanus, M. D., & Fox, J. (2015). Assessing the effects of gamification in the classroom: A longitudinal study on intrinsic motivation, social comparison, satisfaction, effort, and academic performance. *Computers & Education*, 80, 152-161.
- Hoffman, B., & Nadelson, L. (2010). Motivational engagement and video gaming: A mixed methods study. *Educational Technology Research and Development*, 58(3), 245-270.
- Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*, 2(1), 1-26.
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and Organizations: Software of the Mind* (3rd ed.). New York, NY: McGraw Hill.

- IceFrog. (2015). *Defense of the Ancients* (V. 6.78c AI 1.4e) [Computer software]. Retrieved from <http://www.playdota.com/>
- Kessler, C. (Ed.). (1992). *Cooperative Language Learning: A Teacher's Resource Book*. Englewood Cliffs, NJ: Prentice Hall Regents.
- Kiili, K., De Freitas, S., Arnab, S., & Lainema, T. (2012). The design principles for flow experience in educational games. *Procedia Computer Science*, 15, 78-91.
- Kiili, K., & Perttula, A. (2013). A Design framework for educational exergames. In S. De Freitas, M. Ott, M. M. Popescu, & I. Stanescu (eds.), *New Pedagogical Approaches in Game-enhanced Learning: Curriculum Integration* (pp. 136-158). Hershey, PA: IGI Global.
- Kinzie, M. B., & Joseph, D. R. D. (2008). Gender differences in game activity preferences of middle school children: implications for educational game design. *Educational Technology Research and Development*, 56(5-6), 643-663.
- Krashen, S. D. (1982). *Principles and Practice in Second Language Acquisition*. Oxford: Pergamon Press.
- Kuo, M.-S., & Chuang, T.-Y. (2016). How gamification motivates visits and engagement for online academic dissemination – An empirical study. *Computers in Human Behavior*, 55(Part A), 16-27.
- Malone, T. W. (1980). *What Makes Things Fun to Learn? A Study of Intrinsically Motivating Computer Games*. Palo Alto, CA: Xerox.
- Molins-Ruano, P., Sevilla, C., Santini, S., Haya, P. A., Rodríguez, P., & Sacha, G. M. (2014). Designing videogames to improve students' motivation. *Computers in Human Behavior*, 31, 571-579.
- Nation, I. S. P. (2001). *Learning Vocabulary in Another Language*. Cambridge: Cambridge University Press.
- Nation, I. S. P. (2002). *Range* (V. 1.29) [Computer software]. Retrieved from <http://www.victoria.ac.nz/lals/about/staff/paul-nation>
- Newman, R. S. (1980). Alleviating learned helplessness in a wilderness setting: An application of attribution theory to outward bound. In L. J. Fyans, Jr. (ed.), *Achievement Motivation: Recent Trends in Theory and Research* (pp. 312-345). New York, NY: Springer Science+Business Media, LLC.
- Newzoo. (2014). Global Games Market will reach \$102.9 billion in 2017. Retrieved March 19, 2015, from <http://www.newzoo.com/insights/global-games-market-will-reach-102-9-billion-2017-2/>
- Newzoo. (2015). Global report: US and China take half of \$113bn games market in 2018. Retrieved November 18, 2016, from <https://newzoo.com/insights/articles/us-and-china-take-half-of-113bn-games-market-in-2018/>
- Nunan, D. (1999). *Second Language Teaching & Learning*. Florence, KY: Heinle & Heinle.
- Oxford, R. L. (1997). Cooperative learning, collaborative learning, and interaction: Three communicative strands in the language classroom. *The Modern Language Journal*, 81(4), 443-456.
- Park, Y. (2007). *The Effect of Media Interactivity on Mood Regulation: An Experimental Study*. (Unpublished doctoral dissertation). Tallahassee, FL: The Florida State University.
- Pham, A. (2009). Video game revenue jumps 9% in February. Retrieved March 03, 2015, from <http://www.latimes.com/business/>
- Rama, P. S., Black, R. W., Van Es, E., & Warschauer, M. (2012). Affordances for second language learning in World of Warcraft [Special issue]. *ReCALL*, 24(3), 322-338.

- Reinhardt, J., & Sykes, J. M. (2012). Conceptualizing digital game-mediated L2 learning and pedagogy: Game-enhanced and game-based research and practice. In H. Reinders (ed.), *Digital Games in Language Learning and Teaching* (pp. 32-49). New York, NY: Palgrave Macmillan.
- Richards, J. C., & Rodgers, T. (2001). *Approaches and Methods in Language Teaching* (2nd ed.). Cambridge: Cambridge University Press.
- Riot Games. (2009). *League of Legends* [Computer software]. Los Angeles, Ca: Riot Games.
- Rollings, A., & Adams, E. (2003). *Andrew Rollings and Ernest Adams on Game Design*. San Francisco, CA: New Riders Publishing.
- Rosas, R., Nussbaum, M., Cumsille, P., Marianov, V., Correa, M., Flores, P., . . . Salinas, M. (2003). Beyond Nintendo: Design and assessment of educational video games for first and second grade students. *Computers & Education*, 40(1), 71-94.
- Salen, K., & Zimmerman, E. (2004). *Rules of Play: Game Design Fundamentals*. Cambridge, MA: MIT Press.
- Schrader, P. G., Lawless, K. A., & Deniz, H. (2010). Video games in education: Opportunities for learning beyond research claims and advertising hype. In P. Zemliansky & D. Wilcox (eds.), *Design and Implementation of Educational Games: Theoretical and Practical Perspectives* (pp. 293-314). Hershey, PA: IGI Global.
- Schunk, D. H., Meece, J. R., & Pintrich, P. R. (2013). *Motivation in Education: Theory, Research, and Applications* (4th ed.). Upper Saddle River, N.J: Pearson Education.
- Sockett, G. (2014). *The Online Informal Learning of English*. London: Palgrave Macmillan.
- Stevens, J. P. (2009). *Applied Multivariate Statistics for the Social Sciences* (5th ed.). New York, NY: Routledge.
- Tragant, E., Muñoz, C., & Spada, N. (2016). Maximizing young learners' input: An intervention program. *The Canadian Modern Language Review*, 72(2), 234-257.
- Tsai, C. W., & Fan, Y. T. (2013). Research trends in game-based learning research in online learning environments: A review of studies published in SSCI-indexed journals from 2003 to 2012. *British Journal of Educational Technology*, 44(5), 115-119.
- Tzeng, S.-C. (1999). *Optimizing Challenges and Skills in the Design of an Educational Computer Game and Exploring Adolescents' Gaming Beliefs*. (Unpublished doctoral dissertation). Georgia: UMI.
- Van Eck, R. (2009). A guide to integrating COTS games into your classroom. In R. E. Ferdig (Ed.), *Handbook of Research on Effective Electronic Gaming in Education* (pp. 179-199). Hershey, PA: IGI Global.
- Vegt, N., Visch, V., de Ridder, H., & Vermeeren, A. (2015). Designing gamification to guide competitive and cooperative behavior in teamwork. In T. Reiners & L. C. Wood (eds.), *Gamification in Education and Business* (pp. 513-533). Heidelberg: Springer.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.
- Wehner, A. K., Gump, A. W., & Downey, S. (2011). The effects of Second Life on the motivation of undergraduate students learning a foreign language. *Computer Assisted Language Learning*, 24(3), 277-289.

Wu, W. H., Chiou, W. B., Kao, H. Y., Hu, C. H. A., & Huang, S. H. (2012). Re-exploring game-assisted learning research: The perspective of learning theoretical bases. *Computers & Education*, 59(4), 1153-1161.

#### Appendix 1.1. Target vocabulary items

No	Item	Session
1	Damage	1
2	Armor	1
3	Agility	1
4	Ally	1
5	Gauntlets of Strength	1
6	Healing Salve	1
7	Intelligence	2
8	Status	2
9	Mana	2
10	Ironwood Branch	2
11	Buckler	3
12	Chainmail	3
13	Boots of Speed	3
14	Robe of the Magi	3
15	Broadsword	4
16	Quarterstaff	4
17	Claymore	4
18	Gloves of Haste	4
19	Perseverance	5
20	Recipe	5
21	Power Treads	5



## Appendix 1.2. The pretest

## Pre-test (Screening Test)

## به نام خدا

کلاس:

مدرسه:

نام و نام خانوادگی:

معنی لغات و عبارات داده شده در سوالات ۱ تا ۲۱ را از بین گزینه های الف، ب، ج یا د انتخاب کرده و مطابق نمونه دور گزینه مورد نظر خط بکشید.		
نمونه حل شده: معنی کلمه <u>Trap</u> :		
الف. حلقه	ب. سریع	ج. دام
د. دور		

۱. معنی لغت Damage :  
الف. شروع      ب. آسیب      ج. پرتاب      د. نشان
۲. معنی لغت Armor :  
الف. زره      ب. لباس      ج. نقاب      د. سنگر
۳. معنی لغت Agility :  
الف. صلابت      ب. چابکی      ج. زیرکی      د. خشونت
۴. معنی لغت Intelligence :  
الف. کاردانی      ب. بینش      ج. هوش      د. زرنگی
۵. معنی لغت Ally :  
الف. کاوش      ب. عالی      ج. متحد      د. حمله
۶. معنی لغت Buckler :  
الف. حامی      ب. سپر کوچک      ج. دشنه      د. دسته بیل
۷. معنی لغت Status :  
الف. گفته      ب. نوع      ج. تیر      د. وضعیت
۸. معنی لغت Recipe :  
الف. مطابق      ب. بازرسی      ج. دستورالعمل      د. پیروی
۹. معنی لغت Chainmail :  
الف. زره زنجیری      ب. شمشیر سیاه      ج. تیغ سپید      د. سپر قرن
۱۰. معنی لغت Mana :  
الف. نیروی باستانی      ب. جادو      ج. نیروی حیات      د. فانی

۱۱. معنی لغت Broadsword :  
الف. شمشیر پهن      ب. شمشیر آتشین      ج. شمشیر سمی      د. کیوار
۱۲. معنی لغت Quarterstaff :  
الف. تاج امپراتور      ب. کمی پول      ج. وسایل جزئی      د. عصای جنگی
۱۳. معنی لغت Claymore :  
الف. زره طلائی      ب. شمشیر دو دم      ج. زره شاهی      د. شمشیر هندی
۱۴. معنی لغت Perseverance :  
الف. شجاعت      ب. پرستاری      ج. استقامت      د. جهانبینی
۱۵. معنی لغت Ironwood Branch :  
الف. چوب ارکیده      ب. چوب سپیدار      ج. شاخه سرو      د. شاخه آهنین
۱۶. معنی لغت Robe of the Magi :  
الف. ردای حفاظت      ب. ردای سرعت      ج. ردای زرتشتی      د. ردای پرواز
۱۷. معنی لغت Gauntlets of Strength :  
الف. زره کوتاه چرمی      ب. گوهر قدرت      ج. دستکش کوتاه قدرت      د. دستکش چرمی
۱۸. معنی لغت Boots of Speed :  
الف. بوتین آزادی      ب. معجون سرعت      ج. بوتین سرعت      د. معجون آزادی
۱۹. معنی لغت Healing Salve :  
الف. معجون رهایی      ب. داروی طاعون      ج. آفت کش      د. مرهم شفابخش
۲۰. معنی لغت Power Treads :  
الف. گام‌های پرتوان      ب. نیروی سه گانه      ج. چکمه نبرد      د. چکمه رهایی
۲۱. معنی لغت Gloves of Haste :  
الف. دستکش نیرنگ      ب. دستکش بلند شتاب      ج. دستکش نیرو      د. دستکش حامی

## Appendix 2. A sample page of the worksheets used in the Readers' treatment

## Season 2

## Lesson 2

# The Frozen Throne

## Alliance Campaign: To the North

**Pre-reading Activities:****Retelling**

Try and remember what happened in the story last session. Present it to the class.

**Predicting and Skimming**

Look at the title, the pictures, and the phrases below. What do you think happens in the story today?

lord Illidan	you shall be my right hand	to kill Magtheridon	many different soldiers
there are two gates	travel with me to the north	to kill Lich King	to the icy north together

Now, skim the passage and check your predictions.



Prince Kael and the Naga finally found Illidan. The first thing Prince Kael asked Illidan was 'can you help us **solve** our magic problem?' 'There is no solution my young Prince; but I can give you a new **source**' answered Illidan. Prince Kael thought for a moment and then said: so be it; from now on, you can think of us as your allies lord Illidan! 'And you shall be my right hand,' Illidan went on 'our first **task** is to kill Magtheridon; he's the lord of this land and we need to take it from him.'

It took them a few days to make their camp. After that, Illidan sent a few **scouts** to Magtheridon's city. When they came back, they reported that a group of undead protect a very strange item; 'it's called the **gloves of haste**' they said. 'We should surely look into that; Kael, that is your first task; bring me the gloves and I shall tell you about your problem' said Illidan. 'Consider it done my lord.' said Kael. The Prince and his men left the camp and found the gloves. Prince Kael quickly returned and gave them to Illidan. He wore them and was surprised; the gloves made him much quicker!



The next morning, Illidan explained to Kael that he met a great **demon** lord named Jaeden; he said: Jaeden promised me strength; and in return, he asked me to kill the Lich King in the north; and he also promised me power beyond **imagination**; now, to kill the Lich King, I need an army; if you travel with me to the north and help me do it, I promise that I'll solve your magic problem. Prince Kael stepped forward and said: I know the legend of the ice **crown** and the frozen throne; my **claymore** is yours to command; we'll go to the icy north together.



**Solve:** to find the answer to a problem.

**Source:** a place, person or a thing that you sth from.

**Task:** a work that you must do.

**Scout:** a person sent ahead to find information about the enemy.

**Gloves of haste:** a covering for the hand that makes you act faster.

**Demon:** very evil.

**Imagination:** ability to think of new ideas.

**Crown:** a circle made of gold that kings wear on their head.

**Claymore:** a large sword with two sharp sides.

## Appendix 3. The motivation scale

No	Item	Strongly Disagree	Disagree	Agree	Strongly Agree
1.	English lessons are great fun. (I really enjoy learning English)				
2.	I would like to go to various foreign countries.				
3.	I always look forward to the day when we have the English class.				
4.	I would like to make a lot of foreign friends.				
5.	I get worried when I am doing worse than my classmates in the English class.				
6.	I would like to try to use English which I have learned.				
7.	I study English in order to make English easier for me in junior high school.				
8.	I hope that we have more English lessons.				
9.	In my family, we all feel that it is very important to learn English.				
10.	I am somehow always anxious in the English class.				
11.	I study English because I think English will be necessary for me when I am an adult.				
12.	I would like to try and talk to foreigners when my English becomes proficient.				
13.	My parents hope that my English will be proficient.				
14.	I am studying English for a future job.				
15.	I would like to live abroad.				
16.	I get nervous when I answer or give a presentation in the English class.				
17.	I would like to know more about foreign countries.				
18.	My parents tell me to study English hard.				
19.	I am studying English in order to enter a high school or university.				

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