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Fun teaching ! Fun Tech-ing ! Interactive Educational games for Young Learners

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Abstract

Language learning is really a difficult task. Much effort is required at every moment and must be maintained over a long period of time and some motivating, encouraging, innovative and attracting materials may be needed. Therefore, games may help and encourage many learners to sustain their interest and work. Games also help the teacher to create contexts in which the language is useful and meaningful. Games are highly motivating because they are amusing and interesting. They can be used to give practice in all language skills and be used to practice many types of communication. Nothing can be more natural than learning through playing games (Prensky, 2001a); therefore, it is reasonable to assume that integrating games into language courses would benefit students' learning experiences. In addition, interactive games allow students to achieve practical knowledge as well. In contrast to books and movies, computer games are interactive and allow for socialization and participation in the language learning process (Prensky, 2001a). Using interactive games to facilitate learning in educational settings has a number of recognized benefits. For most students, games are highly engaging and motivating. Games provide real-time feedback and built-in goals that can motivate students to improve. In addition, students must make decisions as they play games, and they can see the results of those decisions right away and use that information to inform their next decisions.

Our present day, the use of educational games in learning environments is an increasingly relevant trend. The motivational and immersive traits of game-based learning have been studied, but the systematic design and implementation of educational games remain an elusive topic. In this study some relevant requirements for the design of educational games in online education via technology and web 2.0 softwares will be analyzed, and a general game design method that includes adaptation and assessment features for young learners will be proposed. Finally, a particular implementation of that design will be described in light of its applicability to other implementations and EFL class settings depending upon the outcomes of Ministry of National Education in Turkey.

Key words: interactive language games; technology; young learners; language teaching

Introduction

It is obvious for children to play games to learn (Crawford, 1984); however, when we become older, we gradually alienate ourselves from this learning technique. For years, there is a belief that only those who teach children are expected to incorporate games into their

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lessons. But, most of the researches put forward that a game is the best learning medium for all ages (Shute, Rieber, & Van Eck, 2011) if they are attentively selected, adapted and applied. Games create a setting, which encourages and promotes learning (Clegg, 1991; Salies, 2002). They also provide the opportunity for collaboration and cooperation (Schwartzman, 1997), guarantee immediate feedback and self-reflection (Millis & Cottell, 1998), and stimulate competition (Marzano, 2007). Besides, when students enjoy the game they forget that they are learning (Sharp, 2012) since games promote a kind of “unconscious learning”. Thus, we can reduce the stress from learning and ensure our students’ better perception of the information flow. The curiosity about the outcomes of the game keeps students motivated, engaged and concentrated up until the end and leads to the learning without conscious efforts on behalf of a player (Marzano, 2007).

There have been an immense number of studies on the use of technology in English language classes as the study of Computer Assisted Language Learning (CALL) has been around for the last fifty years (Leakey, 2011). Although there is a belief that researchers, scholars, teachers, students and also parents have varied ideas and feelings about the use of technology in education, there is no doubt that the use of technology plays an important role in most of the students’ lives nowadays and it becomes an inevitable interactional material. Prensky (2001) defines students in the 21st century as “Digital Natives”, those who are born into a digital era where they are surrounded with numerous ways to access and communicate via technological tools. They generally spend most of their lives surrounded by and using computers, videogames, mp3 players, video cams, mobile phones, and all the other tools of the digital age. They are eager to learn through Wikipedia, YouTube, blogs, social networking, etc. As teachers, we should take into consideration that for this new generation learning through technology and technological devices may be fun. So, we have to be acquainted with this technological life to answer their learning preferences and expectations.

Mobile Assisted Language Learning (MALL) via Tablet PCs, smart phones, and other portable devices (Kukulka-Hulme & Shield, 2008) has already been very widespread and popular among learners. According to Crawford (2007) technology cannot be overlooked if we want to bridge the growing disconnect between the learners’ lives and school experiences to tap into the interests of them. Crawford (2007) also tabulates several benefits of technology in teaching learners and states that instructional technology is a natural fit with the functioning of the learners brain, if used meaningfully it can be a tool to develop students’ thinking and learning, it has the potential to diminish cultural barriers and promote multicultural awareness among learners, and the use of the Internet provides the learners ways to carry out research on current events, collaborate with mentors, tutors, instructors, experts, and peers. With the help of instructional technology, language learners will be able to access authentic language, international communities, intercultural/international agenda, and intercultural environments, which provide learners with real communication opportunities.

The teaching program for English in Turkey has been prepared in accordance with the general goals of Turkish National Education as defined in the Basic Law of the National Education No. 1739, along with the Main Principles of Turkish National Education. In order to continue to provide a high-quality public education for Turkey’s elementary and secondary students, periodic revision of course syllabi in all subject areas is necessary to maintain an up-to-date and effective curriculum that is in line with contemporary educational research and international standards for learning (MEB, 2013, p.ii).

As the newly-designed 2nd and 3rd grade syllabi will serve as the foundation for English language learning, the syllabi for the 4th through the 8th grades must also be revised in order to maintain continuity. In addition, while the existing curriculum was designed for learners who are beginning foreign language learning at approximately 8-8.5 years of age, children will now receive instruction in English starting at around 6-6.5 years old; thus, the new program must take the needs of younger learners into account (MEB, 2013, p.ii)

In designing the new English language teaching program, the principles and descriptors of the Common European Framework of Reference for Languages: Learning, Teaching, Assessment (CEFR) were closely followed. The CEFR particularly stresses the need for students to put their learning into real-life practice in order to support fluency, proficiency and language retention (CoE, 2001); accordingly, the new curricular model emphasizes language use in an “authentic communicative environment”. Use of English, therefore, is emphasized in classroom interactions of all types including blended learning, experiential learning and the integration of technology, supporting learners in becoming “language users”, rather than “students of the language” (CoE, 2001), with multimedia and instructional technology tools as much as possible to immerse students in authentic use of language as they work toward communicative competence. (MEB, 2014, p.xi).

Research has shown that the use of computers or mobile devices to supplement language learning provides foreign language learners with opportunities to practice their emergent language skills in a non-threatening environment (Backer 1999; Cononelos and Oliva 1993; Kelm 1992; Payne and Whitney 2002). So, students may be given a chance to produce more interactive conversations and interactions in the target language (Cononelos and Oliva 1993; Hudson and Bruckman 2002; Payne and Whitney 2002).

According to Beauvois (1992) and Hudson & Bruckman (2002), foreign language students may increase in their cognitive skills in the target language and perceived learning with internet based activities. If students participate in situated learning activities, it can be said that they can master some specific domains in the target language. For example, games may transform the learning process from being a passive task to one in which individuals engage in the experience of learning. Computer games, including language games and interactive games, supply “authentic language learning environments” for learning and learners and provide many opportunities for students to develop their knowledge. We believe that learning that occurs in the virtual world can be transferred to learning in the real world. Therefore, we explore the application of interactive games as a language-learning tool and propose a method of teaching and a situation for students to support foreign language learning.

Interactive language learning

Rivers (1997) submitted *Ten Principles of Interactive Language Learning and Teaching*, which attempts to capture in simple language what teachers in different approaches have found to be the essential facilitators of learning (p.3-8). These ten principles can be listed as follow:

- (1) The student is the language learner
- (2) Language learning and teaching are shaped by student needs and objectives in particular circumstances



- (3) Language learning and teaching are based on normal uses of language, with communication of meanings (in oral or written form) basic to all strategies and techniques
- (4) Classroom relations reflect mutual liking and respect, allowing for both teacher personality and student personality in a non-threatening atmosphere of cooperative learning
- (5) Basic to use of language are language knowledge and language control
- (6) Development of language control proceeds through creativity, which is nurtured by interactive, participatory activities.
- (7) Every possible medium and modality is used to aid learning
- (8) Testing is an aid to learning
- (9) Language Learning is penetrating another culture; students learn to operate harmoniously within it or in contact with it
- (10) The real world extends beyond the classroom walls; language learning takes place in and out of the classroom.

Educational games

Educational games are the games which are both designed for learning and entertainment. Games need to encourage “gameplay” or all the thinking, decision-making and actions that make a game fun or not (Anders, Briggs, Hai-Jew, Caby and Werick, 2011). The optimal games may involve the learners intellectually, physically and emotionally. An educational game is one in which the game experience should have an impact on human beings’ senses, knowledge and skills. In short, it can be said that an educational game is a game which an educational content has been embedded.

The educational games...

- (1) help learners achieve the learning objectives,
- (2) focus on the learning,
- (3) provide sufficient feedback to learners,
- (4) are engaging and fun,
- (5) maintain some sort of memory of player actions,
- (6) play on a variety of platforms (e.g. online and offline) and operating systems (Dovey, J. and Kennedy (2006).

Interactive learning and interactive educational games

Interactive Learning is a pedagogical approach that incorporates social networking and urban computing into course design and delivery. Interactive Learning has evolved out of the hyper-growth in the use of digital technology and virtual communication, particularly by students. Beginning around 2000, students entering institutes of higher education have expected that interactive learning will be an integral part of their education. The use of interactive technology in learning for these students is as natural as using a pencil and paper were to past generations. Components of interactive learning include:

- social media (e.g. facebook, twitter, blogs, MySpace, etc.)
- urban computing (e.g. wireless networks, smart phones, mobile devices, etc.)
- serious games (e.g. role playing and interactive games) (Tapscott, 1998)

Interactive websites and interactive CDs and DVDs engage students by providing information and resources along with practice, simulations, and other learning activities. They can be highly interactive, content-rich simulations such as the *ABCYa, ESL Games, Sesame Street, PBS Kids, Learning Games for Kids, National Geographic for Kids, Lingua Leo, Fun English Games, BBC School, Fun Brain, Language Arts*, etc. for lots of examples. In addition the these websites, it is also possible to help students improve and practice the target language through interactive CDs and DVDs such as *Fairyland, Muzzy, Disney Learning, Magic English, Adventures, New Headway, etc.*

Aim of the study

It can be said that it is possible for teachers to be able to create their own interactive language learning activities or materials on the Web, which may suit their own courses and students. This case discusses some of the advantages and challenges for teachers who are eager to and want to design their own interactive Web-based language learning activities and materials through web sites that are already available on the Web. Some of the advantages include accessibility, renewability, and adaptability (Sally, 2002, p.1). On the other hand, there are unlimited numbers of web sites and softwares which provide “busy” teachers to use those ready-made materials. Those materials and activities may also be served through interactive CDs and DVDs on the market. The advantage of those materials is that they provide the users with an intranet and offline opportunity. Therefore, CDs and DVDs may be the most preferable interactive language teaching materials among the users, especially for those who do not have an instant internet access.

This paper aims to introduce some internet-based interactive educational games in addition to web sites and softwares for young learners to help them learn and practice target language as a fun in non-threatening classroom settings.

Using internet-based web sites for educational games

As mentioned above, there are unlimited numbers of web sites, softwares, CDs and DVDs for helping learners to use and practice the target language as an entertainment factor in a stress free situation and setting. Of the web sites mentioned above, one of the most popular one is www.learninggamesforkids.com .This web site provides varied and many opportunities to young learners including vocabulary, parts of speech, syllables, suffixes and prefixes, etc.

Another one is www.funenglisgames.com. It gives young learners a chance to test their some specific parts of language such as grammar, writing, reading and spelling skills. Third one is www.education.com which serves featured, math and reading games for young learners. <http://kids.nationalgeographic.com/games/> website has been supported by National Geographic and submits different, motivating and challenging educational game activities for kids.

On the one hand, *Genki English* engages students in the energetic, “Genki” world of songs, games and exciting lessons. Teachers can have all their students, and their parents, learning more than they could imagine (<http://genkienglish.net/teaching/games/>). Its Facebook page also help teachers connect with Genki English and bring the classroom to life.

In addition, the following websites provide not only for teachers but also for students to learn



and practice their language skills in a fun way.

- <http://www.poptropica.com>
- <http://www.thekidzpage.com/learninggames>
- <http://pbskids.org/games>
- <http://www.ecodesign.at/SuLi/en/home.html>
- <http://www.turtlediary.com/kids-games.html>
- <http://www.education.com/games/educational>

Here, it may be useful to exemplify the use of a randomly selected inter-based educational language game from the web site http://www.abcya.com/kindergarten_computers.html.

Alphabet Bingo

Objectives: The main objective of this game, besides having fun, is to teach students to work in teams, to increase their spelling and letters in English, and they will also receive practice in their listening.

Time: The game can range from 10 minutes to 15 minutes or a whole lesson, depending on how many rounds the teacher decides to play. It is probably not ideal to only play for only 10 minutes because it takes time before starting to prepare the group work and it might be too much to rotate seating or even the desk arrangement in the classroom, and getting all the students to their groups for a game that only takes 10 minutes.

Age: 7-9

Preparation: The teacher must decide how many minutes the groups will get to find the spelled letters. Also the teacher must decide how to divide the class into groups and how many rounds he or she is going to have the students play.

How to play: Alphabet BINGO is a learning activity for children learning the alphabet. To play this internet based game, children must listen for the animated character to say a letter and then click on the corresponding letter in the grid. Children can select from upper-case letters or lower-case letters. In the next step, they may choose grid size for the game (e.g. 3x3, 4x4 or 5x5) depending upon their preferences. Headphones or speakers are required for this game. This game can also be played via their mobile phones.

Students are divided into groups (or pairs) depending upon the amount of the students and they need a PC or laptop with internet access. When all groups are ready, the teacher tells them which game will be selected (e.g. letter sound or letter name). In the second step this time “upper case” or “lower case” section will be decided by the teacher. Finally, the grid size (3x3, 4x4 or 5x5) will be identified and then the students are supposed to work together in their groups to come up with to complete the selected grid within an allocated time. The students must keep their voices down because the groups are competing with each other. The teacher must make sure they have a time limit, for example 3 minutes, and once the time is up he or she walks around and checks the groups. Then the teacher counts the words and the groups get as many points as the letters that they found. This can then be repeated with a different grids. Before beginning, the teacher has to decide for himself / herself how many rounds s/he wants to have his/her students play, and at the end, the score is counted and the

team with the most points wins.

In addition to these web sites, it should be born in mind that the use of interactive CDs and DVDs is indispensable. At the market these materials can easily be found. These are generally the supporting materials of the world famous publishing houses. For example, *MUZZY* series acclaim course uses the video character MUZZY, compelling stories and delightful songs to bring language to life with games. *English Adventure* makes learning English a magical, memorable experience, by using the familiar fantastic world of Disney characters that children know and love. You can let your kids enjoy this world, play games and practice their English with this CD-ROM.

Computer based teaching tools have been making inroads into the classroom over the last few years. One exciting example of this technology is the IWB-a tool that takes a normal whiteboard to another dimension by transforming it into an interactive computer screen. Originally, this was another classic example of the possibilities of technology outpacing practical applications. For example, Fairyland Interactive White Board software serves target language in an interesting, motivating, entertaining and surprising way.

Prime Time is a series of five courses for young adult or adult learners of English at Elementary to Upper-Intermediate level as an IWB software. The series combines active English learning with a variety of lively topics. It includes activities encouraging critical thinking and response as well as web research, realistic pairwork and group work activities, stimulating, realistic dialogues featuring people in everyday situations, etc. Additionally, it encourages learners to take part in all these activities via games.

All these games may be played with either whole class, small groups or pairs. Before starting games necessary instructions and information should be given beforehand. Before deciding how to use game-based learning, the teacher should first determine what they would like to learn. A teacher that fails to focus training around a central idea runs the risk of using a game that fails to connect with the learners. To prevent this, selection of the material should be appropriate to the age group and familiar so that the material is neither too difficult for, nor too familiar to the learner. The steps which are going to be followed should be: setting up the classroom, identifying unknown and related vocabulary, explaining the purpose of the game, teaching how to start and what to do, telling allocated time, giving a chance to students to share and discuss their ideas, answers, views, etc. about the game, evaluation and feedback.

Conclusion

It should always be kept in mind that “A game should not be regarded as a marginal activity filling in odd moments when the teacher and class have nothing better to do” (Su Kim, 1995, p.35). As it has already been known that foreign language learning may be boring and demotivating especially for young learners in traditional language classroom settings. Therefore, language instructors and scholars seek different and plenty of opportunities to engage, take their attention, increase their curiosity and motivate their learners in the target language. It is also beneficial for students to build and increase self-confidence, develop language competency, learn in an unconscious and no-threatening atmosphere (Rankin, Gold & Gooch, 2009). Of these, gaming may be one of the best learning techniques ever invented (Shute, Rieber, & Van Eck, 2011). Some researchers suggest that the dominant percentage of



respondents was satisfied with the Internet-based games. Internet based games encourages students' positive attitudes towards language learning. We believe that the attentively selected internet-based educational games application will facilitate positive learning outcomes for young foreign language learners. To sum up, the benefits of language games may be classified as follow:

- Games make learning more fun, and students will be more motivated.
- Games promote cooperation.
- Games help learners learning from mistakes.
- Games provide quick and specific feedback.
- Games allow students to focus well enough to learn better.
- Games provide opportunities to establish a bridge between school and home.
- Games create a stress-free environment and reduces the anxiety of the learners.
- Games make learners active in their learning.
- Games provide reasons for language skills.
- Games help teachers appeal three different channels of the students.
- Games reenact various situations from real life.
- Games add variety to the range of learning situations.
- Games change the pace of a lesson and help to keep pupils' motivation.
- Games lighten more formal teaching and can help to renew pupils' energy.
- Games provide hidden practice of specific language patterns, vocabulary and pronunciation.
- Games can help to improve attention span, concentration, memory, listening skills and reading skills.
- Games are encouraged to participate; shy students can be motivated to speak.
- Games increase pupil-pupil communication, which provides fluency practice and reduces the domination of the class by the teacher.
- Games help create a fun atmosphere and reduce the distance between teacher and pupils.
- Games can help reveal areas of weakness and the need for further language.
- Games can help to motivate and improve writing skills by providing a real audience context and purpose.

References

- Anders, B.A., Briggs, D.J., Hai-Jew, S., Caby, Z.J., and Werick, M. (2011). Creating an online global health course and game. Retrieved from <http://www.educause.edu/EDUCAUSE+Quarterly/EDUCAUSEQuarterlyMagazineVolum/CreatinganOnlineGlobalHealthCo/242682>, July 2015.
- Backer, J. A. (1999). Multi-User domain object oriented (MOO) as a High School procedure for foreign language acquisition. PhD thesis, Nova Southeastern University.
- Beauvois , M. H. (1992). Computer-assisted classroom discussion in the foreign language classroom: Conversations in slow motion: *Foreign Language Annals* 25, 1, 455– 464.
- Conelous, T., & Olivia, M. (1993). Using computer networks to enhance foreign language/culture education. *Foreign Language Annals* 26, 524–534.

- Council of Europe (CoE). (2001). Common European framework of reference for languages: Learning, teaching, assessment. Cambridge, England: Cambridge University Press.
- Crawford, C. (1984). *The art of computer game design: Reflections of a master game designer*. Berkeley, CA: McGraw-Hill Osborne Media.
- Crawford, G. B. (2007). Brain-based teaching with adolescent learning in mind. 2nd Ed. California: Corwin Press.
- Clegg, A. (1991). Games and simulations in social studies education. In J. P. Shaver (Ed.), *Handbook of research on social studies teaching and learning* (pp. 523-529). New York, NY: Macmillan Publishing Company.
- Dovey, J. and Kennedy, H.W. (2006). Game cultures: Computer games as new media. New York: Open University Press.
- Hudson, J. M., & Bruckman, A. S. (2002). Irc francais: The creation of an internet-based SLA community. *Computer assisted language learning* 15, 2, 109–134.
- Kelm, O. (1992). The use of synchronous computer networks in second language instruction: A preliminary report. *Foreign Language Annals* 25, 441–454.
- Kukulka-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, 20 (3), pp. 271–289.
- Leakey, J. (2011). Evaluating computer-assisted language learning: An integrated approach to effectiveness research in CALL. Hochfeldstrasse, Bern: Peter Lang
- Marzano, R. (2007). *The art and science of teaching: A comprehensive framework for effective instruction*. Alexandria, VA: Association for Supervision and Curriculum Development.
- MEB Talim Terbiye Kurulu Başkanlığı (2013). İlköğretim kurumları İngilizce dersi (2,3,4,5,6,7 ve 8. sınıflar) öğretim programı. MEB Yay. Ankara.
- MEB Talim Terbiye Kurulu Başkanlığı (2014). Ortaöğretim İngilizce dersi (9,10,11 ve 12. sınıflar) öğretim programı. MEB Yay. Ankara.
- Payne, J., & Whitney, P. (2002). Developing L2 oral proficiency through synchronous cms: Output, working memory, and interlanguage development. *CALICO Journal* 20, 1, 7 – 32
- Prensky, M. (2001a). *Digital game-based learning*. New York: McGraw-Hill.
- Prensky, M. (2001b). Digital natives, digital immigrants. *On the Horizon*, 9(5). Lincoln: NCB University Press.
- Rankin, Y.A., Gold, R. & Gooch, B. (2009). Evaluating interactive gaming as a language-learning tool. Retrieved from <http://dl.acm.org/citation.cfm?id=1179340&dl=ACM&coll=DL&CFID=545847564&CFTOKEN=41390505> July 2015.
- Rivers, W. M. (1997). Principles of interactive language teaching. Retrieved from http://edevaluator.org/rivers/10principles_0.html, August, 2015.
- Salies, T. G. (2002). Simulations/gaming in the EAP writing class: Benefits and drawbacks. *Simulation & Gaming*, 33(3), 316-329.
- Sally, M. (2002). Interactive language learning on the web. *Eric Digest*, Washington D.C.
- Sharp, L. (2012). Stealth learning: Unexpected learning opportunities through games. *Journal of Instructional Research*, 1, 42–48.
- Shute, V. J., Rieber, L., & Van Eck, R. (2011). Games . . . and . . . learning. In R. Reiser & J. Dempsey (Eds.), *Trends and issues in instructional design and technology* (3rd ed., pp. 321-332). Upper Saddle River, NJ: Pearson Education Inc.
- Schwartzman, R. (1997). Gaming serves as a model for improving learning. *Education*, 118(1), 9-18.

Su Kim, L. (1995). Creative games for the language class. *Forum*, vol.33, n.1, January-March. USA.

Tapscott, D (1998). *Growing Up Digital: The Rise of the Net Generation*. New York: McGraw-Hill.

<http://www.learninggamesforkids.com>

<http://www.funenglisgames.com>

<http://www.education.com>

<http://kids.nationalgeographic.com/games/>

<http://genkienglish.net/teaching/games>

<http://www.poptropica.com>

<http://www.thekidzpage.com/learninggames>

<http://pbskids.org/games>

<http://www.ecodesign.at/SuLi/en/home.html>

<http://www.turtlediary.com/kids-games.html>

http://www.abcya.com/kindergarten_computers.html