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**LEARNING BY PLAYING. USING COMPUTER GAMES IN TEACHING  
 ENGLISH GRAMMAR TO HIGH SCHOOL STUDENTS**

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***Abstract:** Today's students are totally different from the previous generations. They think, act, communicate, and even learn differently. Many of them know how to work on a computer, especially how to play games, before knowing how to read or write. As there is no doubt about the educational role of the computer, more and more teachers have become interested in its potential role to support and motivate pupils' learning. Teachers try to adjust their teaching methods to the new realities so that they might create a successful and motivational learning context close to students' every day life. The paper examines the role that the computer games might play in teaching, learning and practicing English grammar.*

***Key words:** computer games, English grammar, teaching, learning*

Motto:

The child laughs:

“Play is my wisdom and love!”

The young man sings:

“Love is my play and wisdom!”

The old man is silent:

“Wisdom is my love and play!” [1]

**I. INTRODUCTION**

“Play is older than culture” [2]. This is the very beginning of a well known book- “Homo ludens” written by the Dutch historian Johan Huizinga. We play because we want to, deliberately accepting certain rules. Maybe this is the reason why games have always been used in the process of learning, no matter the age. The image of games has changed during the last decades. Today, we rarely see children playing hide-and- seek in the street, but we are all aware of children playing computer games. Contemporary students have grown up with the new technology. They are the so- called “digital natives” ( Prensky) or “Homo zappiens” (Veen), for whom computers, smartphones, tablets are basic tools. All these have influenced their way of thinking, acting and learning.

**Table 1- Digital natives- Homo zappiens**

Digital natives [3]	Homo zappiens [4]
<ul style="list-style-type: none"> <li>• are used to receiving information very fast</li> <li>• like parallel process/multi-task</li> <li>• prefer graphics before text</li> <li>• prefer random access (such as hypertext)</li> <li>• function best when networked</li> <li>• prefer games to ‘serious’ work</li> <li>• thrive on instant gratification and frequent rewards</li> </ul>	<ul style="list-style-type: none"> <li>• do things at high speed</li> <li>• are multi tasking</li> <li>• develop iconic skills first</li> <li>• adopt non linear approaches</li> <li>• are used to connected &amp; collaborative learning</li> <li>• learn by playing</li> <li>• learn by searching</li> <li>• learn by discovery &amp; experiment</li> <li>• learn by externalizing</li> </ul>

Many contemporary students learn their first English words from computer games and they continue the process of language acquisition through games as long as they play. Thus, English becomes not only a subject in school, but also an important tool for students' main hobby. They are interested in learning English not only to understand the rules of the games, but also to communicate with their peers from other countries. In this context, the traditional method bringing realia in the classroom gets new dimensions. The contemporary students' realia do not refer only to the physical environment, but also to the virtual one. Games occupy an important amount of students' free time (some of them admit that they can spend up to eight hours a day playing on the computer) and they should be a part of a friendly learning environment.

The main findings of the Eurydice Report on learning through ICT at school in Europe (2011) are: students use computers more regularly at home than at school, students use computers at home more for entertainment than for school related activities, computer use in language of instruction and foreign languages is more the exception than the rule [5]. It is obviously time for a change, especially because formal education is no longer the only resource of learning. The informal learning becomes an important aspect for the contemporary people's learning experience. The modern man enrolls in communities of practice or learning networks and is permanently connected to a source of communication and information.

Although using computers in the classroom was firstly received with skepticism both by teachers and parents, today more and more computer based activities are used in schools with an educational purpose. More and more teachers have understood that computer games can be used to motivate students and to create a successful learning environment.

## **II. THEORETICAL APPROACHES**

Computer-supported collaborative learning (CSCL) is one of the pedagogical approaches which support the idea of learning together using computers. It emerged from the philosophies of constructivism and cognitivism, two of the most used learning theories in discussions regarding instructional environments. Yet, these theories were developed long before the technological impact on education and long before the appearance of digital natives.

Connectivism represents a new concept introduced by George Siemens as an attempt for a new learning theory. Siemens believes that "including technology and connection making as learning activities begins to move learning theories into a digital age" [6].

Computer Assisted Language Learning (CALL) "is a term applied to any use of computers in a language course where students are actively using a computer" to perform the stage of practice as an important stage of language learning process. CALL materials are based on the principles of language pedagogy and methodology evolving from different learning approaches (e.g. behaviourist, cognitive, constructivist) and second language learning theories [7.]

Using computer games, the teacher turns to good account some of the most recommended methods of teaching foreign languages: the Direct Approach, the Audio- Lingual Method and the Communicative Approach. The basic principle of Direct Approach aims the use of the target language only; grammar is taught by using the inductive approach [8]. While playing computer games, students have no connection with their mother tongue. The Audio- Lingual Method is based on the behaviourist theory which states that humans could be trained by means of reinforcement. The techniques used in this method are based on drills and pattern practice which include repetition, replacement, and restatement. [ibid.] Communicative Approach stresses more the importance of language functions rather than focusing only on grammar and vocabulary; students use a language in different contexts and with different purposes [ibid.]. Students learn language functions either from instructions of the games or from interacting with other players. Teenagers communicate with their peers during games both speaking via microphones and writing on forums or blogs.

Teachers should take into account the knowledge and the experience their pupils come in the classroom with and start building new acquisitions on it. From all the activities that can be done on the computer, students spend most of their time playing computer games. This interest in computer games

should be addressed in the classroom, as it is an important part of students' lives. Thus, knowledge will be achieved faster, better, in a more pleasant way, and for a longer period of time. The learners will have the opportunity not only to use the existing games, but also to create their own ones to fit their own individual learning needs.

### III. DESIGNING COMPUTER GAMES BASED ACTIVITIES

Before the first computer game based activity the teacher should question the students about their preferences (if they play computer games, how often they do it, what sort of computer games they play, which is their favourite, if they play by themselves or with their friends etc.). It may be a written questionnaire or a discussion. The written questionnaire would give the teacher the intended information from all the students. On the other hand, new ideas may appear during the discussion. Another activity that should be done by the teachers before using a computer game in the class is to play that game, this way they will avoid the problems that might arise (bad functioning, different types of blockage etc.).

There are several points that should be considered when a teacher chooses a game:

- Games should have an aim. They are used to motivate students, not only for fun.
- Games should focus on the use of language. By their means students have to learn, practise, or refresh language components
  - The content should be appropriate. It should fit the curriculum, be correct from all points of view and not to promote wrong values (e.g. violence).
  - Games should be technically easy to use in the classroom.
  - Games should be in accordance with students' age and level of knowledge.
  - Games should keep all of the students interested.
  - It is advisable to use short games; otherwise students may lose their interest.

The teacher should decide at which stage of the lesson the computer based activity would be used and which its goal is (what the students are supposed to learn from the game). This actually means deciding if the class will be based on a deductive or an inductive approach. If the teacher chooses a deductive approach (rule- driven), computer games may be played at the practice stage. If the approach is inductive (rule- discovery), computer games may be used at the presentation stage; the teacher may start with examples from computer games and elicit the rule from the students. Being closed to the Direct Method and avoiding the use of mother tongue in the classroom, the inductive learning is a better choice for a computer games based English class, especially for high school students who are already familiar with the English grammar. More than this, the mental effort is deeper, the students are more actively involved in their own learning process and they will remember the rules better. [9] This does not necessary mean that computer games will not be used in the practice stage to replace the traditional drills.

The teacher should present the rules of the game before showing it to the students, as they rarely read the instructions. Students usually follow certain patterns when they play games. The most common way of learning how to play is by trial and error. If they make mistakes, they re-start the game, or, if it is possible, they ask for advice from their peers, sharing ideas and techniques.

According to the type of activity, the teacher chooses the type of interaction. The students may work individually, in pairs or in groups at the same computer (although they prefer not to share it), or there may be a frontal activity, especially at the stage of presentation, so that the teacher might give some extra explanations if they are needed.

What is taught or practised through games can be tested both by games and by paper based tests. If the teacher chooses the same game or a very similar one for assessment, the students may recognize the patterns. In this situation, the teachers test mainly students' memory, not their knowledge, and the results of the test cannot be considered valid. It is advisable for the teacher to use another game, even if the structure might be similar. More advanced students may be asked to create their own game to test a certain grammar structure. The items of computer games based tests are

basically objective (multiple- choice, match). They offer a score which can be easily turned into a mark.

At the end of each activity, a feedback from the students is needed for the teacher to know if the activity has been successful.

During the computer games based activities, the teacher functions as a resource, an observer and a moderator. Teachers become more facilitators of knowledge.

#### IV. EDUCATIONAL VS. NON-EDUCATIONAL GAMES

The main difference between educational and non- educational games is that the first type has education as the main goal, while the second type focuses more on entertainment.

Grammar and vocabulary are the most common topics for computer games. Instead of long and, sometimes, boring grammar lectures and exercises, the teacher may use computer games. There are many types of games which can be used in the English class: games based on famous TV contests (Who wants to be a millionaire?, Wheel of fortune, Jeopardy) , memory games, guessing games (Hangman, Fling the teacher), board games (Snakes and Ladders), games based on a story. They are structured in different ways: multiple choices, matching, fill in the gaps, sentence ordering. Such games are usually played in groups, especially if there is only one computer available. Some games allow up to four or eight players. These could be the number of the teams. In case of any mistake, the teacher should revise the rule and ask the students to try again. The variety of computer games helps the teacher to do the same type of exercise in different contexts. There are sites for teachers and learning English which offer free games. For example, the site [www.eslgamesworld.com](http://www.eslgamesworld.com) offers a large and free choice of games for learning and practising English grammar.



Figure 1. Fling the Teacher (teaching/ practising conditionals) [10]

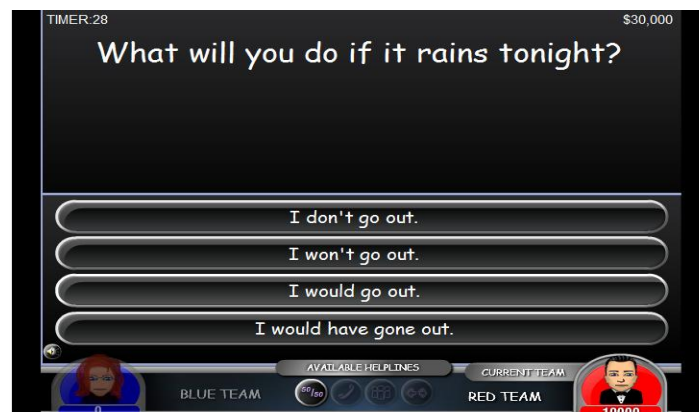


Figure 2. Billionaire (teaching/ practising conditionals) [11]

Another important tool which is at teachers' disposal, beside the online games, is the Macmillan CD [12] which contains an impressive collection of exercises and computer games. They are usually based on scenarios, so the students go through adventures while solving the exercises.

The non-educational games (Sims, World of Warcraft etc.) are obviously more attractive for the students. Yet, they may get educational values, too, even if students usually play these games at home. First of all, the player has to learn how to play, to gain certain strategies. Then, games are generally seen as a framework for providing a meaningful context for language acquisition. Such games improve students' understanding of written and spoken English (they get accustomed to learning words and structures in a context, they learn correct pronunciation and spelling). Beside these, students can use the experience gained from the games in the classroom, especially to develop writing and speaking skills. Here are just a few examples of possible written activities which give the students the chance to practise grammar:

- Write a review of your favourite game/ a game that you have recently played- Present Tense, adjectives.
- Write the story from a game- Past Tense and Past Perfect, adverbs.
- Describe the characters- adjectives.
- Write a diary page of one of the characters- Past Tense vs. Present Perfect.
- Imagine an interview with one of the characters- questions and answers.
- Write a newspaper article about the most amazing situational overturning from a game you have recently played- adverbs, Passive Voice.
- Write an email to a friend recommending him/ her a computer game- adjectives, Modal Verbs.
- Write a narrative with multiple pathways which can be adapted in a computer game- Past Tense, prepositions, adverbs.
- Create an advertisement for a game- questions and answers, Imperatives.
- Express your opinion on a certain action from the game/ the characters' choices- linking words/ phrases.

## **V. ADVANTAGES AND DISADVANTAGES OF USING COMPUTER GAMES IN THE ENGLISH CLASS**

The method of using computers in an English class is definitely a challenge both for the teacher and the students, which has its advantages and disadvantages. Some of the main advantages are:

- Games build up learners' English repertoire in a familiar and comfortable environment (even for students who may have special needs), where they feel confident. More than this, English is widespread used with computers.
- Games increase motivation and desire for self improvement.
- Challenge and competition are key factors for any game and students pay more attention to completing the task.
- Interdisciplinary approach. Students use knowledge from other classes, too.
- Games develop students' ability to observe.
- Games have clear rules and objectives.
- Games develop critical thinking, problem solving, and imagination.
- Games offer new and dynamic forms of teaching/ practicing which replace the traditional worksheets. The so much used drills which may seem redundant to students gain numerous ways of presentation in computer games.
- Games are adaptable for different levels of knowledge.
- Educational games are easy to understand and use.
- Educational games do not take long time to be played in the class.
- There are many online educational games which are free of charge.

- Immediate feedback both for the students and the teacher. The results are more visible (sometimes both visual and acoustic) and have a stronger impact.

- The working time is usually known from the beginning and it is respected
- Games facilitate collaborative learning but, in the same time, students may learn at their own speed and cognitive level.

- Games may be used in the classroom as rewards for students.

Although there are many advantages of using computer games in teaching, the method still has its disadvantages:

- Both the teacher and the students need computer skills.

- Students may forget about the educational value of the game and play just for fun. It is the teacher's duty to establish from the very beginning the goals of the activity and to be permanently aware of the border between entertainment and learning.

- Games may be time consuming for the teachers. They have to find the games, to decide on their educational value and the relationship with other curriculum materials and activities, to play them before, to make the logistic arrangements or even to create them.

- There may be classroom management problems, as it is rarely possible for all the students to work on their own computer. In this case, while a student/ a group of students play on the computer, the other students might lose their attention.

- Excessive use of some computer games may lead to the loss of some skills such as spelling or handwriting.

## VI. CONCLUSIONS

Computer games based learning is not meant to replace the role of the teacher in the class, but it is the teachers' duty to re-create the old education in such a way to fit the personalities and needs of the 21<sup>st</sup> century students. English should be acquired not only through the traditional method of "talk and chalk", using paper, pencils, handbooks etc. Computer games are just one of the possible tools for the contemporary successful learning and teaching environment.

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