Linguistic Contribution of Games to Terminology Acquisition

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Abstract

Undoubtedly, teaching and learning are two elements of the educational process that require continuous updates to keep alive and encourage students' attention, interest, involvement, and independence. To learn a language, communication is the main means of achieving the goal. In a class there is a wide variety of student typologies, therefore, the task arises to select methodologies and techniques that ensure satisfactory activation of students and achievement of the main objectives of the teaching and learning process. Coming up with techniques or activities that ensure inclusiveness is a challenge, but games can be classified as a common denominator for a large part of students, bearing in mind that the most effective approach, especially in foreign language learning, is the communicative approach. In the study undertaken at the Polytechnic University of Tirana, Faculty of Mechanical Engineering, it was concluded that the games used throughout the semester had a fruitful result in the acquisition of terminology by students. The study is quantitative and qualitative. For data collection, a test and a questionnaire were used. In addition to the effectiveness in achieving the objectives of the learning process, overall students had a very positive approach towards games because according to them they experienced pleasure interacting with each other in a harmonious context, and on the other hand they learned about and from their colleagues whenever activities (games) were implemented in the classroom, they were motivated to express themselves a lot. However, it was noticed that games should not surpass a certain limit. While implementing “Role Play”, students’ interest throughout the semester vanished, which means that the implementation of certain games in the classroom should be balanced. In the main, games’ contribution to terminology learning was not only on the educational, and linguistic aspects but also on the social aspects of students.

Keywords: ESP, learning, games, social, educational
1. Literature Review

Vocabulary acquisition is essential when learning a foreign language, even though grammar should not be underestimated. Without words, it becomes hard for speakers to properly convey their ideas and for others to fully comprehend what is being communicated.

"While without grammar little can be conveyed, without vocabulary, nothing can be conveyed." (David A. Wilkins).

Communication lies at the core of a language and as Liangpanit (2013) states, "Vocabulary is a vital part of communication". A coherent two-way conversation results from the word’s recognition, comprehension, and appropriate use. However, to accomplish this communication, students learning a foreign language—in our example case, English—need to learn and commit to memory a specific quantity of English vocabulary. Vocabulary can be one of the main essential blocks for the development of students’ language skills and systems (Nation, 2001; 2003; Schmitt, 2000; Yudintseva, 2015; cited in Wagdi Rashad Ali Bin-Had, 2021). This finding is supported also by Wulanjani, (2016), who states that vocabulary is defined as the basis that brings together the four language skills: writing, reading, listening, and speaking. Considering the aforementioned, approaches and tactics must be carefully chosen, particularly when teaching vocabulary. This is especially true when working with English for Specific Purposes (henceforth ESP), where technical vocabulary plays a major role in learning and teaching.

Over the years, various approaches and strategies for learning English have been studied, with an emphasis on the various student types and the accomplishment of the primary objective, language learning. When English language teaching approaches first emerged, the teacher was the primary figure in the learning process, deciding on class material, presentation style, and assessment methods. It was the teacher who clarified and inquired without facilitating communication between the two principal actors (teacher and student).

The main objectives have long been reading and writing in English (Larsen Freeman 2000, cited in Tanago. N 2017). One of the most popular approaches for translating and understanding words is the grammar-translation method, which places a high value on explaining words from the first language into the English language as well as translating them from the native language into the English language. Grammar, in its very nature, was a fundamental component of this system. Students were first given the rule, and then they had to apply it. However, as time went on, the methodology evolved, deviating the focus from just reading and writing into communication. The emphasis of the teaching process shifted to the students’ engaged communication with each other and the teacher.

The friendly approach of linguists, scholars and teachers toward the communication method, enabled, that the typologies of the students were given importance and that the role of the teacher became a guide and mediator between the current knowledge of the student and new knowledge. One of the pillars on which the communication method is based is student motivation, which means that the teacher -tries to select topics that are of interest to the students and respond to their needs and desires. Motivation is one of the main indicators of the further progress of the student and his/her learning. The acquisition of new vocabulary for English as a Foreign language (EFL) learning may be challenging (Derakhshan & Khatir, 2015), therefore the selection of techniques and activities to achieve this objective must be careful. Implementing techniques that come along with the motivation factor for students is not an easy task, but it is rewarding for both parties.

Game is one of many various methods and activities tailored to the requirements and typologies of the students, who are the focal point of the teaching and learning process. This statement also applies to ESP students. As Chugai (2020) asserts, "The game and
competition make it possible to transform a traditional ESP class into a democratic class where the student is at the center of the educational model”. Language and communicative games carry within them immeasurable educational and social values, although, at first glance, their importance, for some studies may not seem so significant; the latter said referring to Gee (2003) who states that while games in education have the potential to increase engagement and student motivation and to improve learning outcomes, excessive use of games can lead to negative side effects such as reduced attention span and lack of critical thinking. Therefore, a balanced and appropriate use of games in education is essential to fully exploit their advantages and to minimize their missing qualities. According to (Wang 2010, cited in Aytenlar & Çağanağa (2015), games are one of the main tools that create a learning environment in which students are expected to complete tasks that direct them to receive input more clearly and on the other hand, allows them to develop their productive skills, such as communication skills, where they can express themselves through writing or speaking.

Many scholars have discussed their perspectives on games including how efficient they can be at helping students learn foreign languages, specifically vocabulary. Since the game is left up to natural spontaneity, students participate and are able to express themselves without restriction, sometimes even without realizing it, incidentally. By being actively engaged, students develop confidence in what they think and convey.

According to Hadfield (1999, cited in Esra Akdogan 2017), there are two main classifications of games:

1. First, she divides language games into two types: linguistic games and communicative games. Linguistic games focus on accuracy, such as supplying the correct antonym.

2. On the other hand, communicative games focus on the successful exchange of information and ideas, such as two people identifying the differences between their two pictures, which are like one another but not exactly alike. Utilizing these types of games, the connection of the students' prior knowledge with what is being offered to the student, new knowledge, or new words, is achieved. Students exchange information and experiences with each other, thus fulfilling a main element of the game, which is the construction not only of new knowledge but also the healthy construction of human social relations.

Kapp (2014), states that game-based learning is a teaching approach in which games are used to convey knowledge and skills.

According to Klopfer, OsterWeild, and Salen (2009), it is not for nothing that games are considered a very attractive tool for the learning process, more specifically they find that there are five main features which are also known as the "5 freedoms of the game":

1. Freedom to fail. (During the game students are "allowed" to make mistakes, which in other contexts would be treated differently, being considered as failures. Added here, students particularly, and human beings in general learn by making mistakes, and this happens with the students.

2. Freedom to experiment. During the game, players are given the opportunity and space to maneuver by creating new approaches to reach the goal.

3. Freedom to fashion identities, which means to recognize and form their identity. Games allow students to explore themselves in different dimensions and contexts.

4. Freedom of effort. The players approach the game intensely but also relaxed.

5. Freedom of interpretation. Each participant’s game is determined by social, cultural, and personal factors. A game is never experienced the same by 2 players. Even though, these “FreedomS” refer to children, we think that this can perfectly apply to grown-up students as well.
2. **Research Methodology**

2.1 **The research questions of this study were two:**
1. What attitude do students have regarding games in the classroom?
2. What are the benefits of Games in ESP class and ESP terminology acquisition specifically?

2.2 **Background Information on the Independent Variable of the Study**

In the following study conducted at PUT, the focus is on 3 games "Taboo Game", "Just a Minute", and “Role Play”.

a. "Taboo Game" is a game in the center of which is “The term” (the term in the field of mechanical engineering, in our case). This game can be played in groups or individually. Each student writes a term at the top of the paper, while the "taboo" words are placed below; taboo refers to forbidden words that should never be used by the student who will explain the term but on the other hand they are essential for the definition of the term. It is supposed that this game encourages students.

- to "dig" into their vocabulary and prior knowledge to explain the term in other words,
- make use of their creative thinking to create situations or contexts.
- answer questions directed by their colleagues.
- Interact with one another.
- Have a pleasant time in class while learning from each other and with each other by sharing some knowledge regarding specific terms and concepts of mechanical engineering. etc.

b. "Just a Minute". "Just a Minute" is a game that focuses on speaking and reading. Students read additional material from the teacher and then have just one minute to talk about that topic. If the student loses fluency, gets stuck, and starts hesitating, he loses the game and someone else picks up where he left off.

c. “Role Play”, is not novel but its significance to ESP students differs because they take the specific roles of their field of study professions and work with each other in “future real-life situations”.

The study is quantitative and qualitative. For data collection, a test and a questionnaire were used, at the center of which was the attitude toward the use of games throughout the semester and the effectiveness of these games in the acquisition of terminology.

It is worth mentioning the fact that non-digital games have been at the center of the teaching and learning process. Digital games like "KAHOOT" were implemented, but the realization was not as expected due to some technical factors such as the lack of Internet for some students.

2.3 **Participants of the study**

The study sample were the students of the Faculty of Mechanical Engineering and Textile Engineering. The total number of students is 75, 45 of them Mechanical Engineering students, who served as the experimental group, and 30 Textile Engineering students, who were the control group. The methodology used by students is the same for both study programs and is related to the “Mechanical Engineering” book, by “Express Publishing”. The study was conducted in the academic year 2021-2022, in the first semester.
3. **Results of the Study**

As previously mentioned, the approach and the student’s attitudes toward the game are the primary subject matter of the first research question.

Fig. 1. Students’ general attitude on games

When asked a comprehensive question if they enjoyed the games employed for teaching English, as can be seen in Fig. 1. All fifty students responded that they did. The attitude was 100% positive. This general friendly approach to the game continued with the other questions, when asking for their opinion on whether the games used in the classroom were interesting and dynamic, 100% of the students answered Yes.

Fig. 2. Video effectiveness in developing speaking skills.

Since games integrate several language skills, a question addressed to students sought to highlight the effectiveness of games in developing students' English-speaking skills. According to Fig 2, 75% of the students said that the games played a very important motivating role in expressing themselves in the English language.
Fig. 3. Communicative and Social Aspect

One of the questions of the questionnaire was about the communicative and social aspects, asking the students if the games during the lessons have influenced the increase of communication and interaction between the classmates. 65% of students asserted that yes, communication between them and other students has increased. Meanwhile, 17 out of 50 students marked NO on their questionnaire. The students were also asked about their approach to mistakes. They were asked to state whether losing the game encouraged them to play again, 85% answered No, and only 15% answered Yes. Along with the previous question, students were asked about their experience with the “Just a Minute” game.

Fig. 4. Students’ attitude towards “Just a minute” game

When asked which were the main benefits they felt while playing these games their answers varied, 33% affirmed that they became somehow “fluent” without noticing, while not paying much attention to grammatical errors or write pronunciation, 22% said they considered this game as a challenge with themselves, 23% felt they had fun, while 22% said they didn’t really like it a lot.
Fig. 3. Writing skills

Regarding writing skills, the students were asked about the Role Play game, where in most cases they were in the role of engineers and discussed different projects, if the game encouraged them to write more and willingly or if they felt forced by the possible negative assessment. 60% answered that they did it willingly and 40% answered that they were forced by the evaluation they could receive. The reluctance of students to write down on paper was obvious.

Asked what their favorite game was, choosing from Role Play, “Just a Minute” and “Taboo Game”, 65% answered “Taboo Game”, 20% “Just a Minute”, and 15% “Role Play”.

In addition to the questionnaire, the students of the experimental group and the control group conducted a test on the topic of terminology. While the control group's outcomes were average, the experimental group's results were quite satisfactory. In the results obtained from the questionnaire, it was observed that students strongly supported the presence of different games in the classroom. The absolute involvement in games and the categorization of these games as interesting and dynamic has made students partially unconsciously and incidentally learn much more than they would probably learn if they were tasked with the same content but not the same techniques in teaching. Alleviation of the tension that a student may experience when faced with the new or the unknown is accomplished almost entirely by communicative games. This statement is fully supported by AlNatour & Hijazi (2018), who state that "The successful use of games in vocabulary learning depends on the responsibility shown by the teacher in the selection of interactive games, and in reducing the student's stress and creating a pleasant atmosphere in the classroom". The students expressed that, even if they made mistakes during the game, this did not stop them from continuing, on the contrary. The establishment of a joyful and dynamic environment enhances their energy, increases their desire to learn and acquire as many terms as possible, and makes them more receptive to learning from and with each other. This is because they are exposed to new terminology as well as novel approaches, information, and content. Games, among other things, had a great impact on the creation of social relations, promoting communication between them, cooperation on the one hand, and friendly competition on the other. The latter is reflected in the active involvement in games, especially in the game "Taboo Game" and in the game "Just a Minute".

It was noticed that, when it comes to writing skills, students are reluctant to engage willingly. This was also noticed in the questionnaire but also throughout the semester. Assessment is important for most students and is the main impetus for creating dialogues with each other.
4. Discussion

The linguistic effect of these games on ESP students, and the social effects as an aimed by-product. The games implemented in this research, regarding the linguistic benefits, focus more on accuracy and fluency. Productive skills such as writing and speaking have been the subject of these games while making use of receptive skills such as listening and reading.

Students’ needs, analysis of students’ needs, and their distinction are some of the factors that led us to implement Games to fulfill as much as possible these needs. Games, through creative writing and speaking activities such as “Role Play”, boost ESP students’ desire to write in English. These creative speaking and writings are based on students’:
- needs,
- potential
- desires, and
- goals. Students “acting” as future engineers, they will become, gives them satisfaction and the needed inspiration to write as much as possible and as accurately as possible and on the other hand to speak as fluently as possible. When memory lapses or unanticipated circumstances arise, creative speaking enters the picture, and that is what happens in these three games.

Referring to the three latter factors, they serve as the best encouraging factors for students to perform as well as possible. There will be a boost of self-confidence in students’ writing skills. Creative Writing through “Role Play” expands technical terminology, appoints students to employ proper grammar and syntax, and aids in the professional development of their general writing skills. Through games, there is a reinforcement of grammatical rules in a practical setting. Utilizing interactive scenarios, students can apply grammatical concepts, enhancing their understanding and usage of proper sentence structure, tenses, and syntax. The contextual learning facilitated by games fosters a more intuitive grasp of linguistic principles.

**Games** contribute to students’ enrichment of technical terminology. Games, especially those designed for educational purposes such as “Taboo Game”, often incorporate a diverse range of vocabulary. Engineering students engaging in language-based games can encounter technical terms, expanding their lexicon contextually and enjoyably. Consequently, they make use of these terms when playing and interacting with one another. As Aline (2011), concludes in her own study “Apart from stimulating the imagination, these processes help students remember concepts, as learning is linked to real life experience”.

**Games’ social contribution** to students is that these games possess the potential to boost students’ self-esteem, facilitate more comfortable self-expression, and assist them in resolving emotional and social issues. It was noticed that students freed themselves of any Team Building and Collaboration: Multiplayer games encourage teamwork and collaboration. Engineering students, often engaged in group projects, can benefit from the collaborative environment fostered by games. Learning to communicate and coordinate with teammates in a virtual setting translates well into real-world engineering projects that require effective teamwork.

**Stress Reduction and Social Bonding:** Engaging in games provides a welcome break from the rigors of engineering studies. The social aspect of gaming fosters connections among students, creating a sense of community. This, in turn, can contribute to stress reduction and improved mental well-being, positively impacting overall academic performance. The latter is also supported by Plass, Homer, & Kinzer (2015) who define gamification as ‘the use of game elements, such as incentive systems, to motivate players to engage in a task they otherwise would not find attractive’.
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Conclusions
The use of games in the classroom had many positive effects, including:

1. The games proved to be a very motivating tool for higher education students, specifically Mechanical Engineering students, at the Faculty of Mechanical Engineering.
2. By means of games, a comprehensive involvement of students in learning is ensured, which increases the learning outcomes and strengthens the social ties of students among themselves.
3. Games promote healthy competition and stimulate critical thinking. "Role play" is one of those games in which students improve their critical learning in contexts and situations related to their field of study.
4. Employing "Taboo Game" and "Just a Minute" students learn a lot from each by revealing their knowledge and terminology on certain topics and “awakening” their creative thinking by creating situations and different contexts to explain the term and continue the game.
5. Students who were introduced to the games, had better results in the exam centered on Terminology, which means that their memorization and understanding of lessons and terms through games is effective.
6. Balanced use of games is the key to “reaping” the benefits of games by integrating all four language skills and prioritizing communication at the same time. Exceeding the use of games can turn into a "boomerang", creating monotony, losing attention, and not encouraging students' critical thinking in specific contexts.

References


