THE APPLICATION OF GAME TECHNOLOGIES IN TEACHING ENGLISH TO ENGINEERING STUDENTS

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Abstract

This article explores the use of gaming technology in the English language instruction process for engineering students. Game technologies in English lessons have long been shown to be an excellent approach to diversify language learning, push students to speak a foreign language, and engage students in an English-speaking setting. A meticulously designed and methodically thought-out game facilitates mastery of a foreign language and the development of effective speaking abilities. This study aims to evaluate the viability of using educational games in the classroom and ascertain whether integrating game technology enhances the effectiveness of the learning process. The article suggests that game-based learning boosts student motivation and promotes speaking activity.

Keywords: Engineering Students, Game Technologies, Higher Education, Professional Communication, Teaching English.

Introduction

Engineers must have strong English communication skills to prepare technical reports, explain complex ideas and new technology, and so on in their profession. The fundamental concern is how to increase engineering students' foreign language competency when professional communication in the studied language is a key component of "language competence for professional interaction" (Murzo 144). The procedure of teaching foreign languages to technical university students is still fraught with difficulties. Lack of motivation, difficulty locating relevant information, poor time management skills, and an inability to complete tasks efficiently are only a few of the issues. To improve the effectiveness of "engineering students' acquisition of knowledge in English" (Gerasimova, 52), new methods must be developed and implemented that are not just dependent on learning grammatical structures and words and translating professionally oriented literature.

Gamification

The term "gamification" refers to the application of game rules to attain real goals. In other words, through playing, you may make mundane work more enjoyable, unnecessary chores more appealing, and complicated tasks simpler. Education has already been "gamified." A student receives a good mark if he or she completes an activity correctly in class. If the students commit a
few blunders, they will receive a failing grade. Each year, there is a level upgrade and a move to the next "level." Interactive teaching strategies improve educational quality, enable teachers to exercise "creative initiative," and are essential in today's world of "informatisation of society". They also help students develop their personal and professional qualities and abilities for successful language communication.

Professional-Oriented-Communicative Competence Using Games

According to many researchers, game is a type of developmental activity, a form of mastering social experience. It is one of the complex human skills, and there is no way to do without it both in the process of teaching foreign languages to future engineers and in the issue of forming intercultural competence.

The history of the emergence of the game to relieve difficulties in professional activities, and also the use of game activities to transmit knowledge about the surrounding reality, and in addition, as an essential means for entertainment, development of competition and improvement in the aesthetic sense - all these aspects have received their consideration in a number of works. Researchers have also investigated the use of game technology to develop lexical skills; to develop teamwork, critical thinking and self-learning; to increase students' interest and motivation; to increase students' self-organization and personal responsibility for learning outcomes.

The benefits of games as effective teaching aids have been the subject of various research, from which the following conclusions may be made. (Avouris and Yiannoutsou, 12; Chua and Balkunje, 12; Cortez et al., 11; Fonseca et al., 12; Gürbüz et al., 14; PadillaZea et al., 13; Peterson, 10; Slovaček et al., 14):

- The pupils' use of games improved their reading comprehension significantly.
- Games provide creative and exploratory learning settings.
- The entertaining aspect of games increases students' attention and concentration in addressing a specific topic.

Digital Games and Communication Skills

We live in a digital age, with broad use of digital technologies in many aspects of life and widespread usage of computer games and mobile game. The twenty-first century is the Digital Game-Based Learning generation, a generation raised with technology and contributing to the predominance of digital games. [Chuang et al., 10]. The rules of the game are gradually permeating areas where they previously appeared to have no place in today's world. It is now impossible to imagine a modern education system without the use of developing information and communication technologies, which necessitates the improvement of means and methods as the educational process becomes more innovative and creative, so the use of creative techniques plays a critical role in the development of "clarity, mobility, and effectiveness of the learning process" (Boyko, 40).

A recent study's key conclusion is that social connection associated with playing digital games boosts student engagement (Lehnart et al.). Digital games may also promote constructive group processes and decision-making procedures. Digital learning games are distinguished from both amusement and training games. They are meant to promote comprehension within an academic topic area by focusing on knowledge acquisition as a goal in and of itself. (Klopfer, Osterweil, & Salen, 2009). Games also have the potential to promote teamwork and communication skills. In such cases, the teacher is increasingly expected to possess extra abilities aimed at organising the process of learning and education in accordance with the rules of the game. Learning new skills and abilities "in the search and implementation of advanced technologies" is urgently needed (Litvinenko et al., 435). For example Nintendo's Practise English, A smartphone game allows players to practise language abilities and revise prior information by presenting them with a range of real-world scenarios. This game's main goal is to make English accessible to all users. It achieves
this goal by providing short interactions, daily tasks, exams for each level, reviewing activities, and other more specialised tasks that focus on grammar, vocabulary, and syntax. All of these features work together to keep learners engaged and motivated.

**Communicative Games**

The preference for the communicative method of teaching foreign languages stems from the fact that, at this point in the development of modern society, it is challenging to avoid using contemporary "gadgets" and methods of communication, where language serves as a useful communication tool.

The term "communicative" refers to a method of teaching and learning that places more emphasis on the importance of language function than on syntax and vocabulary. (Harmer, 200). Game means "an activity with rules, a goal and an element of fun" (Hadfield). In addition, game is "an activity in which the learners play and usually interact with others" (Wright et al.). They added that in order to express their own point of view or give information, the learners must speak or write as in getting the meaning from others, they have to understand what people are saying or have written (Gate). Communicative game is a set of well fun-design activities that can stimulate students’ interaction in the classroom. These games require them to take part actively in classroom by speaking and writing in order to express their own point of view or give information. More than that, students’ confidence will be automatically formed due to its concept in building habits of interaction. Since people are emotional beings, it is important to take this into account while teaching language to learners. The student must be amused in order to improve learning. Communication that is facilitated by entertainment is referred to as commutainment. Commutaining refers to the process of fostering communication via amusement. The words communication games and language games can be used interchangeably to refer to entertainment activities. Such exercises may be utilised to help students develop their communication and language abilities while also being enjoyable and enjoyable if they are properly planned, prepared, practised, and carried out.

During communicative games, Students are encouraged to communicate by asking and responding to questions, filling in the gaps in information, performing activities to locate information or predict sentences, and completing numerous quizzes and questionnaires. This method encourages conversation and the desire to learn/clarify facts/events that the pupils are unaware of. Because there are several locations in the distribution of information according to relevance during communicative games, a conversation generally starts as participants work in pairs or groups to explain or justify their variation. Exercises like "Agree or Disagree" where students must use all available vocabulary to communicate their thoughts are another excellent example of communicative activities. Through these exercises, students will engage in authentic communication, where the completion of their communicative task is more significant than the precision of the language they use.

**Role-Playing Games**

In a role-playing game, players or language course students take on the roles of fictional characters to collaborate on the creation of a play that is then performed in front of an audience. Role-playing is intended to provide pupils practise with certain language functions and to teach them speaking techniques. Students role-play imaginary scenarios by having talks or arguments about them. This is a compelling argument for students to practise vocabulary and grammar in a range of contexts, both casual and formal, such resolving conflicts at a business meeting or meeting, or at a job interview. The presence of a single plot that addresses a specific communicative task and the distribution of role connections amongst the participants of communication—which are frequently of a conflictual nature—are the key variables that condition the nature of role-playing. When students pick a role, they play out a character or themselves in a specific setting.
Situational Games

Situational games allow you to repeatedly practice a speech sample under circumstances that are as near to real conversation as possible, complete with all of its distinctive elements like emotional engagement and goal-oriented speech structures. The use of the situational and game methods in foreign language instruction enables the teacher to engage students’ work, pique their interest in learning the material even better and uncovering new sources of information, which adds to the motivation that our students so frequently lack. These competitive circumstances provide timid and unsure students a chance to shine, get over their fears, and help them grow in the areas of initiative and action.

Conclusion

Any type of learning that involves the use of games is founded on the principles of cohesion, teamwork, the greatest level of involvement from every student, and an abundance of opportunities for the expression of creativity in the context of the game. This, without a doubt, increases the effectiveness of the educational process. When employed at a technical institution, game-based learning activities have the major benefit of allowing participants to disclose themselves, learn to take an active role and assess their fitness for a certain career. When students are motivated and ready to speak, their passion helps them overcome barriers like shyness, fear, rigidity, and anxiety. Overall, we can draw the conclusion that the employment of gaming approaches may be highly successful for enhancing the quality of the educational process based on the positive dynamics in students’ professional-oriented English communication.

References


Dewi Ratna Sari, Ummi Kultsum and Ari Armadi “Using Communicative Games in Improving Students’ Speaking Skills” Canadian Center of Science and Education 210, No. 1 2017.

Dreimane S., Upenieks R. “Intersection of serious games and learning motivation for medical education: A literature review” Research Anthology on Developments in Gamification and Game-Based Learning (2022), pp. 1938-1947


Nancy B. Sardone and Roberta Devlin-Scherer “Digital Games for English Classrooms” Teaching English with Technology vol. 10, no. 1, pp. 35-50.


