GAMIFICATION METHOD TO IMPROVE SPEECH SKILLS AND PROFICIENCY AMONG STUDENTS: METHODOLOGY FOR IMPLEMENTATION

*Note: Sub-titles are not captured in Xplore and should not be used

Aida Nurutdinova
Department of Contrastive Lingustics)
Kazan (Volga Region) Federal University)
Kazan, Russia
ORCID: 0000-0001-5759-0820

Dilyara Shakirova
Department of Contrastive Lingustics)
Kazan (Volga Region) Federal University)
Kazan, Russia
ORCID: 0000-0003-3794-5916

Zulfiia Fazlyeva
Department of Contrastive Lingustics)
Kazan (Volga Region) Federal University)
Kazan, Russia
ORCID: 0000-0003-2413-1024

Elena Dmitrieva
Kazan State Power Engineering University
Kazan, Russia
ORCID: 0000-0001-6900-9378

Dina Sheinina
Department of Contrastive Lingustics)
Kazan (Volga Region) Federal University)
Kazan, Russia
ORCID: 0000-0001-6531-448X

Gulnara Galeeva
Kazan (Volga Region) Federal University)
Kazan, Russia
ORCID: 0000-0003-0087-734X

Abstract. The effectiveness of learning a foreign language depends on the individual aspects of foreign language speech acquisition, among which one of the most important goals in teaching is the development of lexical and grammatical skills. Communication and interaction using a foreign language are carried out solely on the basis of formed understandings of grammar and vocabulary, as well as the degree of understanding between interlocutors also depends on them. The relevance of the research is connected with the modernization processes in the methodological system of teaching foreign languages in the Russian Federation. All this leads to the motivational interest reduction in learning a foreign language, to the use of outdated techniques and methods of working on the formation of lexical and grammatical skills and - as a consequence - to the unattainability of the educational standard, in which the value of foreign language proficiency is one of the competitiveness pledges of a young specialist. Based on the exposed inconsistence, it seems necessary to study innovative methods of increasing vocabulary and grammar skills by means of information technologies. *The research object* is the process of vocabulary and grammar skills formation in foreign language classes. *Research subject* is the use of gamification method to improve the vocabulary and grammar skills. *Research objective is to* develop a methodology for the use of gamification method to improve the level of vocabulary and gramma skills among the students of non-language faculties.

Keywords: gamification, learning trajectory, practice-oriented activities, e-learning resources, intellectual development, role-playing game, digital technologies, education quality, effectiveness of the educational process.

I. INTRODUCTION

At the present stage, the phenomenon of gamification is understood by most researchers as the process of applying mechanisms of game technologies in the subject areas that traditionally do not involve a game [1]. Another variant in the field of game-based foreign language teaching is the notion of "edutainment", or the process of learning through entertainment using game technology [2].

As O.R. Yufereva points out in her study, modern students perceive only what is presented to them in an attractive "shell", especially in computerized form [3]. The author suggests adjusting the system of lessons to students' interests, using information and communication technologies as an integral part of any lesson.

Revealing the phenomenon of gamification T.V. Sapukh also mentions these two phenomena forming such a term as "gamification" which implies using a game form to teach and work with educational material in a computerized form by means of a computer game [4]. Nevertheless, the problem of students' low interest in the foreign language class is the subject the researcher proposes to solve through two approaches in the use of technology "gamification", in the form of communication-oriented work forms, and in the form of web quests, based on the use of the Internet.

Thus, we can conclude that the gamification phenomenon is a universal from the point of view of the modern stage of society development means in teaching any subject, the effectiveness of which depends on the quality and consistency of using a variety of multimedia technologies, game approaches to the presentation of material and work on it, due to which a certain innovativeness of the teaching process is achieved, as well as increasing motivational interest of students in the learning process. E.G. Azimov writes about the scope of this approach in the educational system, the gamification sphere applicable and refers to the practices that combine the learning process with entertainment [5].

Y.S. Bortsov distinguishes the essential characteristic of the gamification phenomenon, the peculiarity of this technology is the introduction of

game entertainment into the system of traditional lectures, lessons, classes, seminars and master classes, because without TV programmes, desktop, computer and video games, movies, music, websites, multimedia programmes etc. it is already impossible to imagine modern learning and communication [6].

T.P. Voronina also writes that the gamification phenomenon in education is a non-traditional method based on an innovative approach in education [7]. In particular, the author writes that in contrast to the traditional approach to learning, in the gamification case the subject takes an active part in the learning process by engaging in a computer game. Showing subjective preferences, feelings and reactions to the experience acquired in the course of such learning, he/she forms motivation for active knowledge assimilation.

O.A. Bogdanova, speaking about the possibilities of using innovative information and educational tools in teaching a foreign language as a phenomenon of modern teaching methodology, offers the following technological stages of development and implementation of this form in pedagogical activity [8]:

1. Setting pedagogical goals, defining tasks of the whole complex of computer games.

2. Analyzing the available teaching material in the selected section of the foreign language study.

3. Didactic analysis of available and effective forms for presenting the material.

4. Methodological analysis, planning criteria for evaluating activity at the lesson.

5. Creating an algorithm for learning activities in the lesson.

6. Structuring the selected material, creating hyperlinks, filling it with multimedia files, etc.

7. Speech support composition while students perform tasks within a didactic computer game.

8. Discussion of the outline using computer games with specialists.

9. Making possible corrections and final testing with the use of didactic computer games.

10. Implementation of the outline with the use of computer games in the classroom, as well as subsequent self-reflection by the teacher on the positive and negative aspects of the workshop.

Computer games for learning English can be divided into 3 groups:

The first group can include computer programs for learning English with gamification elements.

The second group includes games designed for learning English. For the formation of lexical and grammatical skills, vocabulary games are effective.

To the third group we can refer various games in English, which are not educational. One variant of these games is quests.

Thus, we have determined that the structure of the gamification method in foreign language classes is, in the first place, interactive games using multimedia tools, primarily ICT tools, a multimedia board and the Internet. Such didactic games allow students to organize interactive interaction with the information and educational environment, to immerse themselves in the virtual world of the game, which is already familiar and known to them, as well as to simultaneously reinforce the language phenomena being studied in a non-traditional, attractive form. The use of an innovative approach to the organization of didactic games satisfies the demands of the information and educational environment and greatly increases the motivational interest of students in learning a foreign language.

The syllabus development with the use of computer games in the foreign language teaching using the gamification method implies the traditional process of pedagogical planning with a reference to innovative forms in presenting the teaching material. Besides, the consulting and pre-testing stages are obligatory because computer games in the structure of education gamification usually occupy the main part of the lesson, and if something fails to run, the lesson will fail and the key objectives of the lesson will not be achieved. For this reason, careful planning and preliminary testing of selected computer didactic games are the main in the methodology of teaching the foreign language.

II. MATERIALS AND METHORDS

The aim of the empirical stage was to determine the effectiveness of the gamification method in enhancing students' proficiency in speech and grammar skills.

The empirical stage was aimed at assessing the veracity of the hypothesis that the involvement of gamification method in the process of increasing the lexical and grammatical skills will qualitatively

improve the proficiency of both vocabulary and grammar sides of foreign language speech, as well as increase the level of motivation to learn a foreign language.

In order to assess the truthfulness of the hypothesis the empirical stage of the research was organised according to the following practical tasks:

1. to assess the initial level of formation of vocabulary and grammar skill among language students.

2. to develop and test the methodology of using gamification method to improve the level of vocabulary and grammar skills among the students of linguistic faculties.

3. to evaluate the effectiveness of the implemented method by conducting a secondary research on the dynamics of the improvement of the level of vocabulary and grammar skills among students.

The empirical stage of the research was organised within the Institute of Philology and Intercultural Communication Kazan Federal University in the conditions of the language department activities.

Participants of the pedagogical experiment were 50 students studying in the 2nd year. 25 students were members of the experimental group and the same number of students were members of the control group.

In order to achieve the goal and objectives of the empirical study, a comprehensive methodology was developed and applied. The formation level of vocabulary and grammar skill was assessed according to the evaluation of the level of mastery of the following types of foreign language speech activity:

- speaking;
- listening;
- reading;
- writing.

Let us characterise the selected diagnostic tools, according to which the study was organised.

The diagnostic toolkit that was used to organise the study.

1. vocabulary and grammar skill in speaking.
2. vocabulary and grammar skill in listening.
3. vocabulary and grammar skill while reading.

4. vocabulary and grammar skill in writing.

Based on the calculation of all the samples performed by the students, it is possible to characterize the overall level of vocabulary and grammar skill according to the following levels:

- 33-28 points: high level of proficiency in vocabulary and grammar skill;
- 27-22 points: good level of vocabulary and grammar skills;
- 21-16 points: satisfactory level of vocabulary and grammar skills;
- 15-10 points: low level of vocabulary and grammar skills;
- below 9: no vocabulary and grammar skill is formed.

Thus, it was determined that in the ascertaining stage of the study average and low levels of formation of vocabulary and grammar skill among students were found. Most of all, the lack is found in active speech activities: speaking and listening. In this case, students have difficulties in establishing comprehension of an audible foreign language text, as well as make a large number of lexical and grammatical errors when presenting their own statement. Passive speech activities are formed at a satisfactory level: students are able to establish a general understanding of a written text and are also able to express their own opinion through writing. Nevertheless, they also tend to make a rather high number of errors in these activities.

III. RESULTS

The aim of the formative stage of the research was to develop and test the methodology of using the gamification method to improve the level of vocabulary and grammar skills among the students of non-language faculties. Let us present a characteristic of the content of this method.
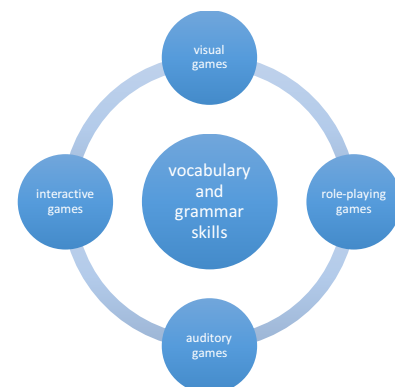

Table 1. A set of games to be used as part of the

gamification method to improve the level of vocabulary and grammar skills

Let us analyse the types and ways of using games which were included into the methodology during the formative stage of the research.

1. the use of interactive games.

2. practicing exploratory reading using interactive methods.

This is also one of the main in the methodology of increasing the vocabulary and grammar skills through the use of gamification method. Among the highlighted games that can be used to improve the vocabulary and grammar skill are the following interactive forms of work with foreign language material:

– the use of ICT;

– group work, speed competitions;

– visual and pictorial methods;

– group discussion of what they have read;

– creative activities of students.

3. the use of visual games.

One of the most effective ways to improve the vocabulary and grammar skills is to make a scheme or a text plan highlighting the most important information: we used a visual game on making a flowchart. The whole range of games for improving vocabulary and grammar skills includes the following levels:

– work with a single word;

– work with a single phrase, sentence;

– work with a text and its parts;

– work with a partner.

For the propaedeutic stage, in which the main work was focused on students with low levels of formation of vocabulary and grammar skill, we recommend using the following types of tasks to consolidate the skill of English letters confluence:

1. Reinforcement of reading individual letters.

2. Expansion of vocabulary of English-speaking words.

3. Consolidate the search for a single word in the text/speech.

4. Use of listening games.

5. Role-playing games.

6. Homework.

We will highlight the methodological recommendations for the use of the gamification method in improving the vocabulary and grammar skills. Among the educational games a special place belongs to computer games, which allow the teacher to involve three types of perception at once:

– auditory;

– visual;

– kinetic.

However, most computer games, along with their many advantages, due to their general nature, have a number of disadvantages. For example, it is not always advisable to use them in a specific lesson, because the teacher often needs only certain elements rather than the whole game in order to achieve a result.

An educational computer programme or a computer game specially selected according to the topic of the lesson is a kind of simulator that organizes and manages students' independent work and creates conditions for students to form their knowledge on their own. The use of computers in foreign language lessons is a necessity and imperative of our time. And if you add to all of this, add another important aspect - the use of computer games at the lessons, which makes mastering a foreign language is more entertaining and attractive to students, its learning becomes easier and easier, and most importantly fun. The use of multimedia helps to implement personal-oriented approach to learning, providing individualization and differentiation, taking into account the characteristics of students, their level of learning and aptitudes. Learning a foreign language by means of computer games is currently of great interest to students and teachers as well as tutors should take this fact into account.

The programs available today make it possible to display learning information on the computer screen in the form of text, sound, video images and, of course, games. Computer-assisted learning makes it possible to organise independent work for each learner. Integrating a regular class with a computer allows the teacher or instructor to transfer part of their routine work to the computer, making the learning process more interesting and intensive. The computer does not replace the teacher, but complements him or her. The selection of learning games and programs depends primarily on the

current material, the level of training of the trainees and their abilities.

IV. DISCUSSION

Working with the computer not only promotes interest in learning, but also makes it possible to regulate the presentation of learning tasks by degree of difficulty and to stimulate students by providing an opportunity to encourage correct decisions. In addition, the computer completely eliminates one of the most important causes of negative attitudes towards learning - failure due to misunderstanding of the material or a gap in knowledge. It is this aspect that has been provided by the authors of many computer-based learning programmes, including computer games. Students are given the opportunity to use various reference books and dictionaries, which can be called up on the screen with a click of the mouse. Working on the computer enables students to bring their communicative and cognitive task to The computer helps students to complete the communicative and cognitive task with the necessary help, and if we take into account that it will take place in the form of a game, the result of mastering a foreign language will not be long in coming.

Thus, we have identified the key features of the gamification method as a way to improve the vocabulary and grammar skills among non-linguistic students. The features of these games are based both on traditional forms of work (interaction in pairs, in groups, in teams, evaluation of student's actions) and on innovative pedagogical technologies using ICT (interactive tasks on an interactive board, work with a microphone and a pronunciation assessment scale, short videos, etc.). Work on improving the level of lexical and grammatical skills is carried out in conjunction with the formation of other competences in a foreign language: speaking, listening. Thanks to this approach in foreign language teaching methodology in higher education institutions it is possible not only to form motivational interest of students in the material presented, but also to lay all foundations for future formation of key foreign language competences and to establish interdisciplinary links.

V. RECOMMENDATIONS FOR CONSTRUCTING GAMIFIED EDUCATIONAL COURSES

We would like to formulate a number of recommendations for the use of gamified educational programmes.

1. Gamified educational programmes should aim to awaken intrinsic motivation and enthusiasm by providing space for imagination and role-playing.

   For example, students can be motivated individually by allowing them to explore content at their own pace, so that they find 'hidden' information along the way (e.g. math problems that are a little more complicated or interesting trivia and facts that are not usually talked about in history classes) [13].

2. Competition can be a powerful motivating factor. Too much emphasis on competition can also change students' perception of the course so that the ultimate goal of learning becomes not gaining knowledge and a skill in becoming the best, and for others students may lose motivation to participate altogether.

3. A gamified educational course uses external motivators to attract students, but focuses on stimulating their intrinsic motivation through other elements. Motivation that comes from within is more powerful and permanent, making this type of motivation more likely to positively influence the effectiveness and quality of learning in the long term.

4. Students can also be motivated by having the opportunity to learn from each other. This can be done by allowing a student who has already successfully learned part of the educational programme to help another student understand a particular material.

What hinders the use of gamification: Gamified courses can fail for several reasons.

A. Logistics

Gamification relies heavily on technology as a platform therefore educational institutions that do not have the necessary equipment and resources (such as computers or portable devices and broadband Internet access) have difficulties implementing gamification elements in the educational process. In addition, homework assignments in gamified courses may require each student to have access to the Internet. Broadband Internet access is unevenly distributed in any country of the world, including Russia, which means that this crucial gamification element becomes impossible to apply everywhere.

B. Interest and motivation

Gamification is often seen as a popular activity, but there is a large group of people who do not play

video games, and gamification is unlikely to be a useful pedagogical innovation in the context of teaching these social groups. There is an 'anti-gamer' mentality in contemporary society and there are a number of popular negative stereotypes about video games, which can lead to negative reactions to attempts to gamify educational courses. Gamification can also undermine the learning success of students who have performed well in traditional courses.

C. *Wrong Targets*

Gamification in education is a teaching methodology and hence it does not include any predetermined objectives. Typically, the gamification process is undertaken in areas where quantitative numeracy skills or an analytical knowledge set is required, for example maths courses (especially at university level) and reading courses (at primary level), it is not possible to gamify, for example, essay writing.

D. *Improperly applied gamification*

The gamification process will be hampered and is likely to gain a negative reputation throughout the educational system if it is associated with failed attempts in which a gamification guise has been used while the basic elements have not been incorporated. What matters is not the appearance of gamification through visible elements, but the relevance of applying the underlying principles of gamification to the curriculum.

Thus, it can be concluded that gamification provides an opportunity to exploit the motivational power of games in many fields, including education, by adding game elements to various non-game environments. However, one of the main problems with this approach is the lack of a systematic method of game design [14, 15, 16]. Indeed, design is a subjective notion as there is no perfect formula for creating educational games.

VI. CONCLUSIONS

Our research allows us to draw the following conclusions:

1. Gamification is an integral trend of information society development, capturing all spheres of economy, management, science, education, social development.

2. Gamification in higher education allows creating an information-learning environment that promotes independent, active pursuit of knowledge, professional skills and abilities,

such as critical thinking, decision-making, teamwork, being ready to cooperate. Gamification thus helps to unleash creativity and motivates self-education.

3. Gamification is an effective tool for improving professional education in higher education institution, as it allows improving learning material, engaging students in the learning process, making it interesting, provides systematic, continuous, in-depth study of the subject, shapes personality through experience of defeat and error, corrects its behavior, forms system of knowledge, skills and competences transferable to life practice. Learning through gamification becomes innovative, flexible, personalized, autonomous, fair in assessment of achievements and motivation, develops communication, independence and activity of learners, promotes their self-development.

4. The number of educational projects which use gamification elements is growing gradually, new educational applications with game-like methods are being created, game technologies with multifunctional user interfaces are being developed, various platforms are being modified to fit the ideas of gamification.

5. Pooling the efforts of scientists from different countries will help to create an effective concept of gamification in modern education and create a class of professionals ready to successfully implement it in the practice of universities and schools.

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