

DOI: <https://doi.org/10.32820/2074-8922-2023-78-23-28>
УДК 378:81'243

BUSINESS-PLAYING AS AN INTERACTIVE FORM OF FOREIGN LANGUAGE LEARNING IN THE CONTEXT OF HIGHER ENGINEERING EDUCATION

© Bryntseva, O. Podorozhna A.
Ukrainian Engineering Pedagogics Academy

Information about the authors

Olena Bryntseva: ORCID: 0000-0002-2354-7901; elenabrynceva2@gmail.com; Senior lecturer of the Department of Foreign Language Training, European Integration and International Cooperation, Ukrainian Engineering Pedagogics Academy, 16 Universitetska st., Kharkiv, 61003, Ukraine

Alina Podorozhna: ORCID: 0000-0001-5248-7699; podorozhnik79@gmail.com; Senior lecturer of the Department of Foreign Language Training, European Integration and International Cooperation, Ukrainian Engineering Pedagogics Academy, 16 Universitetska st., Kharkiv, 61003, Ukraine

The article is devoted to the issues of business games creation and implementation in the process of teaching a professionally oriented foreign language at engineering universities. It has been determined that in the context of teaching a foreign language to engineering students, a business game develops foreign language communication skills, thus forming not only professional competence, but also communicative competence; it reproduces the subject and social content of students' future professional activities, forms a system of relations typical for specialists in the relevant field. Therefore, in the learning process through business games, students provide substantive content to foreign language communication, integrate their professional skills into foreign language skills, master the ability to build social relationships, learn to overcome conflict situations and respond adequately to changing circumstances.

The article presents an example of the methodological development of the business game "Innovations in the Energy Sector", which was tested at the Department of Foreign Language Training, European Integration and International Cooperation in partnership with the Department of Automation, Metrology and Energy Efficient Technologies (UEPA, Kharkiv). The experience of using business games in the process of foreign language learning at an engineering university allowed the authors to identify their specific features: using special didactic, methodological and technical support; careful preparation of speech materials; activation of students' independent work at the preparatory stage; selection of tasks in such a way as to stimulate independent training in business games not only to master new foreign language vocabulary (including terminology), but also to model various styles of speech (including terminology).

The article concludes as follows: using game-based learning increases students' motivation to learn foreign languages and cultures, prepares them for practical foreign language skills in real life and in their future professional activities.

Keywords: foreign language teaching, business game, engineering university, case-technology, students' independent work.

О. Бринцева, А. Подорожна «Ділова гра як інтерактивна форма навчання іноземних мов у контексті вищої інженерної освіти».

Стаття присвячена питанням підготовки та проведення ділових ігор у процесі навчання професійно орієнтованої іноземної мови в інженерних університетах. Визначається, що у контексті навчання студентів інженерних спеціальностей іноземної мови ділова гра розвиває вміння іншомовного спілкування, формуючи в такий спосіб не лише професійну компетенцію, а й комунікативну; відтворюється предметний і соціальний зміст майбутньої професійної діяльності студентів, формується система стосунків, характерна для фахівців відповідної галузі. Таким чином у процесі навчання за допомогою ділових ігор студенти наповнюють іншомовне спілкування предметним змістом, інтегрують свої професійні навички з іншомовними мовленнєвими навичками, опановують уміннями будувати соціальні взаємовідносини, навчаються долати конфліктні ситуації та адекватно реагувати на мінливі обставини.

У статті наведено приклад методичної розробки ділової гри "Інновації в енергетичній галузі", апробація якої проводилася на кафедрі Іншомовної підготовки, Європейської інтеграції та міжнародного співробітництва спільно з кафедрою Автоматизації, метрології та енергоефективних

технологій (УПА, Харків). Досвід використання ділових ігор у процесі вивчення іноземної мови в інженерному університеті дозволив авторкам виокремити їхні певні особливості: використання особливого дидактичного, методичного та технічного забезпечення; ретельна підготовка мовленнєвих матеріалів; активізація самостійної роботи студентів на підготовчому етапі; добір завдань таким чином, щоб стимулювати самостійну підготовку до ділової гри не лише до опанування нової лексики (зокрема й термінології), а й моделювання різноманітних стилів мови (зокрема й термінології), а також моделювання різних стилів мови (зокрема і мовленнєвих), зокрема і мовленнєвого.

У статті зроблено висновки, що використання ігрової форми навчання підвищує мотивацію студентів до вивчення іноземних мов і культур, готує їх до практичного використання іноземної мови у реальному житті, а також у майбутній професійній діяльності.

Ключові слова: викладання іноземної мови, ділова гра, інженерний університет, case-технологія, самостійна робота студентів.

Problem statement. The globalization of the business and technical world today encourages the need for engineering students to master the English language for professional communication in the field of international business.

Since future engineers will communicate with their partners over the phone, will be involved in discussions and negotiations, and participate in business meetings and presentations, it is necessary to organize business games aimed at simulating these situations in the foreign language classes at the technical university. It will allow developing students' instrumental motivation to master the skills of foreign language professional-oriented communication by means of a foreign language in academic conditions. Maximum closeness of the training process to real industrial and business situations in the gaming form will also contribute to the development of students' adequate communication behavior and the correct choice of language and speech means of expression of their thoughts in a foreign language. Therefore, the issues of preparing and implementing business games are relevant to the methodology of teaching English for specific purposes.

Literature review. The problems of game-based organization of the learning process have been studied by M. Ellis, C. Johnson, K. Jones, G.P. Ladousse, W. Rivers, etc. According to many researchers, business games expand the range of topics for communication, make the process of foreign language communication more dynamic and expressive.

Business game simulates future professional activity of students, teaches them how to act in those or other real-life situations.

In the context of foreign language teaching, a business game develops foreign language communication skills, thus forming not only professional competence, but also communicative competence. Business games recreate the subject and social content of students' future professional activity and develop a system of relations typical

for the specialists of the respective branch. On this basis, we can conclude that within the academic process by means of business games students fill their foreign language communication with subject content, integrate their professional skills with foreign language speech skills, master the skills of building social relationships, learn to overcome conflict situations and react adequately to the changing environment.

The purpose of the article is to determine the specifics of business games and the possibility of their application in academic process of engineering universities to intensify the foreign languages teaching.

The statement of the main material. In the theory and practice of teaching English in higher engineering education the emphasis has shifted from the linguistic principle to the communicative one. The aim of teaching English at engineering universities is to prepare students for foreign language, including professional communication in English (developing skills and abilities to communicate fluently using different styles of speech, including scientific one, applying professionally oriented vocabulary - terminology).

The main task of a modern technical university foreign language teacher is to choose the methods and forms of learning activity organization that would allow to stimulate interest of future specialists in the course of learning the discipline. In this regard, one of the most effective forms of teaching is the interactive form of learning. Interactive game, being a special way to involve students in creative activities, is one of the means providing optimal conditions for the development and self-realization of participants in the educational and pedagogical process.

The ultimate goal of teaching English at an engineering university and the implementation of the communicative teaching principle determine the use of special didactic tools enhancing the activity and involvement of the students in the foreign language learning process. After all, the best way to learn

something is to actively interact with it. These didactic tools can be considered as an important factor for the effectiveness of the learning process.

The most effective and efficient interactive forms of practical organization of foreign language teaching to engineering students are competitions, scientific-practical conferences, thematic projects, business games, discussions, classes involving multimedia technical means. Our own practical experience in using non-traditional forms of practical classes in training future engineers-teachers allows us to say that the business game is one of the most effective and multidimensional methods.

Gaming activity influences the development of attention, memory, thinking, considerations, all cognitive processes. But its main advantage when used in technical higher educational institution is that it allows its participants to reveal themselves, to learn to take an active position, to test themselves on professional suitability.

Any of the organizational forms of game-based learning allows to go beyond the limits of a traditional practical lesson, this format of the learning process organization increases the possibilities of both the teacher and the students and stimulates the learners, in particular in teaching English, to communicate, to dialogue within the group, allows each student to personally meet and experience the reality of foreign language communication.

In a play-based, practical activity in a communication situation, the teacher formulates communicative tasks in such a way as to ensure not only action, but also interaction, i.e., to simulate the communicative conditions for each student. One student's remark should act as a stimulus for other students' speech activity.

We consider the business game in teaching English as a learning speech activity based on the principle of professional communication, promoting simulation of professional relationship conditions.

The main parameters determining the nature of the role situation are the presence of a single plot corresponding to the chosen situation and the role relations between the participants of communication, which often have a conflicting character. When learners take on a role, they are playing themselves or a character in a specific situation. There is therefore no spectator in role-playing, and therefore there is certainty that communication will take place and that the behaviour of the participants will be interpreted correctly.

For the game to be considered successful, it is necessary to define the rules of the game:

- the student is asked to put himself/herself in a situation that may arise outside the classroom, in real life: from meeting an acquaintance in the street to business negotiations, conferences, etc;

- the student should adapt himself/herself to a role in the situation. In some cases, he/she can play himself/herself, in some other cases he/she will have to take on an imaginary role;

- role-players should behave as close to real life as possible and their behavior should be appropriate to the role they are playing;

- the role-players should concentrate on communicative language use rather than the usual practice of fixing language units in speech. Researchers identify several stages of organizing and implementing a business game. We believe that the game realization has three stages: preliminary, the game itself, and the final stage.

For instance, methodological design of a business game at studying the topic "Innovations in energy industry" is based on interactive learning through business games on case-method basis - learning in the context of simulated situation reproducing real conditions of scientific, industrial, economic, social activity; simulation of various situations related to working out and making collective decisions, reconstruction of functional interaction in a team, etc. Case technology can also be considered as an "active learning method". The conceptual foundations were formulated in the early 20th century by American philosopher and educator John Dewey. He claimed that the traditional system of education, based on acquisition and assimilation of knowledge, should be opposed to learning "by doing", so that new knowledge is extracted from practical activities and personal experience. Case-technology is an interactive learning technology aimed at developing students' knowledge, skills, personal qualities on the basis of analysis and solving real or simulated problem situations in the context of professional activity, presented in the format of a case. Case-technology application in education allows English language teacher to implement problem-based learning, assess the development of students' competences (ability to work in a team, self-organization and self-education, ability to search, store, process and analyze foreign language information from various sources and databases, present it in the required format using information and computer technologies, ability to consider modern trends of engineering and technology in their activities, etc.). Case technology is aimed at the development of interdisciplinary knowledge and

skills, as the solution of a problem situation may be at the "junction" of different disciplines and require the application of knowledge from other disciplines and scientific fields. The establishment of interdisciplinary links takes place in the process of students' work on the case (during its analysis and development of a solution). Problem solving contributes to the development of students' meta-disciplinary knowledge and skills, including communication skills and so-called soft skills: teamwork, flexibility, conflict resolution, persuasion and compromise. This methodological development is based on meta-subject links.

The goal of the preparatory stage, also called the informational-motivational, explanatory stage, is to determine the conditions for speech and procedural actions, develop optimal ways of communicating and using the learning material in speech, match forms of interaction and relations between communicants, i.e. participants of the game. At the preparatory stage, an important type of work is the presentation of theoretical material on the topic, search for additional information or statistical data, approval of the rules of conduct common to all.

At the preparatory stage all these issues are discussed, a behavioral line depending on the situation is developed, participants are selected and roles are allocated, problem-solving options are explored.

The preparation and implementation of the role play should be done in stages. The first stage is to learn the linguistic material and to find the missing linguistic means by oneself. At the beginning of the topic it is important to set the students up for a role play, discuss the game situations and select the speech actions. In the second stage a number of micro-situations representing fragments of the final speech situation are organized. At this stage individual rejoinders are practiced to justify their own opinion, to clarify information, to confirm what has been said, to express their attitude to the problem discussed in imaginary communication situations. At the third stage students are given roles, practice the language material that best reflects the meaning of the role play and play out the language situation.

The business game was tested at the department of Foreign Language Training, European Integration and International Cooperation in cooperation with the department of Automation, Metrology and Energy Efficient Technologies (UEPA, Kharkiv).

Participants of the business game:

- The director of an innovative enterprise. It is his responsibility to create and update the work

plan. Coordinating the work of the team. Making decisions on operative issues.

- Manager (2 persons). They are responsible for setting tasks for the team members in accordance with the approved work plan; design and description of the innovative enterprise project; creating a business plan and determining the costs of the product innovation, he/she provides information and clarification of the work done to the management team. Using information technology, he/she proposes the necessary ideas for the innovative project and methods of its implementation.

- PR Manager is responsible for the presentation of the innovative product to the customer or the investor.

- A technical specialist is to think over the technology to be used in the innovation project, and then he/she will come up with the necessary ideas and methods to carry them out. He/she will contact the technical support service for advice.

- An analyst also assesses the team's work and makes recommendations on how to improve the project in order to minimize time and resources. In particular, he/she is responsible for communication with the technical support service.

- The Expert Department is made up of lecturers from the Automation, Metrology and Energy Efficiency Technology Department and provides a certificate of manufacturing innovative product.

- Public service - the third-year students of UEPA. They interview and recruit the participants, offer different kinds of work, for which the participants receive a salary.

- Technical Support Service (UEPA masters) advises the participants of the business game on the production technology of an innovative product, provides the teams with an estimate of the necessary equipment and materials required for production.

- Consumers- teachers of Automation, Metrology and Energy Efficiency Technology Department. The team presents a business plan for an innovative

of the company to buyers and investors for the purpose of selling the product.

- Team of experts - lecturers of Foreign Language Training, European Integration and International Cooperation. The team presents to the group of experts a passport of the enterprise for the production of an innovative product. The experts assess the team's work.

At the beginning of the game the teacher-tutor introduces the rules of the game to the students, announces the theme of the lesson and justifies the relevance and practical relevance of the topic,

informs the students of the game plan, goal and objectives as well as the assessment criteria. For the success of the business game, it is recommended to start with preliminary training. The students should be divided into 4 teams of 6 persons. All participants in the game should be familiarized with the scenario and given instructions.

Having received a communicative task, the student finds himself/herself in the context of a game. Speech communication in a role-playing game necessarily implies that there is someone to whom the communication is directed, i.e., communicators who come into speech contact. The participants of speech communication, entering into speech contact, perform certain social roles, the presence of which is one of the components of the learning and speech game situation. Representatives of different social groups use in their speech appropriate turns of phrase and vocabulary, for example: in the speech of a customer, sentences expressing a request prevail; in the speech of a mechanical engineer - affirmative sentences; in the speech of a director - imperative ones. When allocating roles, students' interests and individual characteristics should be taken into consideration. A student's interest in the role to be performed increases his/her motivational readiness for foreign language speech action, allows to eliminate such factors as: shyness, fear, stiffness, anxiety

In the process of such activities not only students learn certain professional aspects of their future work, but also automation of foreign language speech skills, which becomes a practical goal of foreign language teaching with the help of business games at an engineering university.

The aim of the main stage is to solve a certain issue related to the future professional activity of students, to achieve a positive result. At this stage the participants of the game implement their speech intentions according to the pre-defined roles, creatively reveal their professional and communicative abilities, form their social relationships in the given conditions of the game. The game allows students, against the background of solving typical business problems, to actualize in memory and automate in speaking active terminological vocabulary, consolidate speech patterns and models of business communication, to master the skills of argumentation, persuasion, logical inference, defending their point of view. In the process of the game the participants overcome psychological barriers such as insecurity, fear of making a mistake, which ultimately has a positive impact on the level of their foreign language communicative competence.

The aim of the final stage of the business game is to control, analyze and summarize the results achieved. At this stage the personal contribution of each participant of the game is evaluated, their role is analyzed, reasons for possible failures or difficulties faced by the students during the game are explained. It allows students to reflect on the course and results of their activities and to prevent possible typical mistakes in the future. During the discussion of the game the students consider the contradictions and look for the best options to overcome them, focus their attention on the quality of both professional performance of roles and correctness of linguistic presentation of their statements. To summarize the results of the game, students write, for example, a written report on the work done or a post on a website where they make suggestions and critical remarks.

The business game, as a means of simulating all kinds of activities, people's activities and relationships in society, is a means of finding new (for students) ways of interaction and methods of effective learning, as it removes the contradictions between the theoretical, abstract aspect of the learning process and the practical, real aspect of professional activity. In the business game, the acquisition of knowledge by the learners takes place as a result of collaborative activities. Each of them finds a specific solution to the problem in accordance with their role and purpose. A business game is not only about interactions in learning, but also about learning how to work together and cooperate.

The participants of the game noted that they gained an important experience through participation in the business game - the ability to work in a team, to agree with the team members, to take responsibility for the result of the completed task. The students noted that "an invaluable experience was the opportunity to try themselves in a certain role, in a certain profession in practice".

It should be noted that the learning function of the business game is extremely important because it brings to the training the subject and social context of the future professional activity and through this to create an adequate atmosphere, as compared to the usual training, for the formation of the personality of the future specialist.

Also, business games through modeling and acting out business activities in learning environments form foreign language communicative and professional competences of students, providing students with high

qualification and increasing their competitiveness in the labour market in modern conditions. Business games have a great developmental potential and motivate students to generate their own foreign-language statements on topics directly related to their future professional activities in situations as close to real-life as possible, so this type of learning activity is an effective means of professionalization of foreign language teaching to engineering students.

Conclusion and further research prospects. The experience of using business games at the (UEPA, Kharkiv) allows us to highlight their specific features: use of special didactic, methodical and technical support; careful speech material development; activation of students' independent work in the course of game preparation; selection of tasks so as to stimulate independent training for business game not only in mastering new foreign language vocabulary (including terminology), but also in modeling

Список використаних джерел

1. Дроздова І. П. Наукові основи формування української професійної творчості студентів нефілологічних факультетів вищих навчальних закладів : монографія / І. П. Дроздова. – Харків : КСАМЕ, 2010. - С. 320.
2. Brecke R. Cooperative Learning, Responsibility, Ambiguity, Controversy, and Support in Motivating Students / R. Brecke, J. Jensen // *InSight: A Collection of Faculty Scholarship*. – 2007. - № 2. – Pp. 75-63.
3. Bryntseva O. V. Professionally oriented teaching of foreign language writing of engineering students / O. V. Bryntseva // *Проблеми інженерно-педагогічної освіти : зб. наук. пр. / Укр. інж.-пед. акад.* – Харків, 2020. – № 69. – P. 85–91.
4. Kusnierek A. Developing students' speaking skills through role-play / A. Kusnierek // *World Scientific News*. – 2015. – № 7.1. – Pp. 73–111.
5. Tran V. D. The Effects of Cooperative Learning on the Academic Achievement and Knowledge Retention / V. D. Tran // *International Journal of Higher Education*. – 2014. – № 3.2. – Pp. 131-140.
6. Zhang Y. Cooperative Language Learning and Foreign Language Learning and Teaching / Y. Zhang // *Journal of Language Teaching and Research*. – 2010. – № 1.1. – Pp. 81–83.

various styles of speech (including scientific), as well as formation of skills of selecting necessary information.

Thus, it can be noted that the use of business games of various types in English classes is a form of training that significantly enhances the process of communicative competence formation in the academic and professional sphere of communication, which, as it is known, represents one of the main objectives of foreign language teaching in an engineering university. Organizing and carrying out classes with the use of various forms of game-based learning requires from both the teacher and the students a great deal of time and physical effort. However, as practice and own pedagogical experience show, the application of game-based learning increases students' motivation to learn foreign languages and cultures and prepares them for the practical application of a foreign language in real life and in future professional career.

References.

1. Drozdova, IP 2010, *Naukovi osnovy formuvannya ukrayins'koyi profesiynoyi movy dlya studentiv nefilolohichnykh fakul'tetiv vyshchyykh navchal'nykh zakladiv* [Scientific fundamentals of formatting the Ukrainian professional communication of students of non-philological faculties of higher educational institutions], KSAAME, Harkiv.
2. Brecke, R & Jensen, J 2007, 'Cooperative Learning, Responsibility, Ambiguity, Controversy, and Support in Motivating Students', *InSight: A Collection of Faculty Scholarship*, no 2, Pp. 75-63.
3. Bryntseva, OV 2020, 'Professionally oriented teaching of foreign language writing of engineering students', *Problems of Engineer-Pedagogical Education*, iss 69, Pp. 85-91.
4. Kusnierek, A 2015, 'Developing students' speaking skills through role-play', *World Scientific News*, no 7.1, pp.73-111
5. Tran, VD 2014, 'The Effects of Cooperative Learning on the Academic Achievement and Knowledge Retention', *International Journal of Higher Education*, no 3.2, pp. 131-140
6. Zhang, Y 2010, 'Cooperative Language Learning and Foreign Language Learning and Teaching', *Journal of Language Teaching and Research*, no 1.1, pp.81-83.

The article was received 28 February 2023