

Formation of Communicative Intercultural Foreign Language Professional Competence with the Help of the Business Educational Game "World Congress on Intelligent Systems"

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Abstract: In this research, the authors study the possibility of increasing the effectiveness of teaching a foreign language to future specialists in the field of transport by using the business game "International Congress on Intelligent Transport Systems" in the classroom. The relevance of the study is determined by the fact that the proposed topic of the lesson corresponds to the principle of specialization of teaching foreign languages in non-linguistic universities to ensure the successful formation of communicative intercultural foreign language professional competence among students. The novelty of the study lies in the fact that previously a business game based on the materials of the congress, which is popular all over the world, has not been developed and the effectiveness of this teaching method has not been studied. At the same time, for students at a transport university, there is a need to include a business game on this topic in the foreign language curriculum program. The results of the educational experiment showed that conducting such a business game contributes to a better assimilation of the topic, compared with traditional learning.

1 INTRODUCTION

The requirements for specialists in the field of transport are high, due to the reason that they must have knowledge of a foreign language sufficient for free communication among foreign colleagues. In the professional activity of a specialist in the field of transport, the role of such communication is extremely important. The success of business meetings and negotiations directly depends on how the specialist is able to communicate with foreign partners, adhere to the planned strategic line, and use the correct speech behavior. Therefore, when hiring, young specialists must demonstrate that they are communicative both in their native and foreign languages, able to work in a team, able to coordinate their decisions with other employees, including foreign colleagues. The formation of the above skills and abilities requires a foreign language teacher to use non-standard techniques and teaching methods that would contribute to a more effective formation of professional communicative foreign language

competencies through the active introduction of a professionally oriented context into training (Perfilova, 2011).

At the same time, the educational process at the university is characterized by the following features that must be taken into account when choosing tools and methods for teaching a foreign language:

1. The number of hours is limited by the training program.
2. The requirements for the qualifications that students must develop are high.
3. Applicants to a non-linguistic university have different levels of language proficiency, which can be extremely low.
4. Graduates should be able not only to speak a foreign language at the everyday level, but also to freely navigate professional topics.
5. In the learning process, the skills and abilities of both written and oral speech should be formed.

Traditional forms of teaching a foreign language in the form of lectures and seminars do not always

fully meet these requirements, while such forms of learning as business games help the teacher to imitate fragments of students' professional activities and activate the learning process (Liakhova, 2020; Liakhova, 2021; Liakhova, 2020; Quan, 2014; Riyanti, 2019).

2 MATERIALS AND METHODS

In a business game, learning a professional foreign language takes place in the process of joint activity, which imitates the real situation of communication typical for specialists in this field. Each participant in the business game has its own role and function, in accordance with which they solve their separate communicative tasks. The educational component of the business game is determined by the ability to set the subject, social and communicative contexts of the future professional activities of students participating in the business game (Liakhova, 2020).

It is advisable to use business games when the educational goals set are difficult to achieve by other teaching methods, for example, to learn some aspects of professional activity that need visual representation, to practice the knowledge and skills already acquired by students, to master stable professional forms and methods of communication in a foreign language in conditions of separation from a foreign language environment, the formation of professional competencies at the level of a professional picture of the world of future specialists (Liakhova, 2020).

The business game "World Congress on Intelligent Transport Systems" is advisable to be carried out with RUT students in order to acquaint them with a significant event in the field of intelligent transport systems at the international level and give students the opportunity to use the already formed early communication skills and speech skills in a foreign language in a situation that imitates their future professional activity. In addition, the chosen topic makes it possible to conduct a business game both in English and in German and French, which are the working languages of the ITS World Congress (ITS World Congress, 2021).

We put forward a hypothesis that a business game as a learning tool on the topic "Participation in the International Congress on Intelligent Transport Systems" will improve the efficiency of teaching a foreign language to students - future specialists in the field of transport.

3 RESULTS AND DISCUSSION

To test the hypothesis of the study, a training experiment was conducted with the participation of the control and experimental groups. Both the control and experimental groups wrote a pre-experimental lexico-grammar control test, which allowed to determine the level of foreign language proficiency of the participants before the start of the experiment. The theme of the training is "Participation in the International Congress on Intelligent Transport Systems". The experimental group went through this topic while participating in a business game, while the control group was trained according to the curriculum program. The final control event was a report on this topic, which students had to submit twice - in writing (in the form of an essay) and in the form of an oral presentation at the conference.

To conduct training for the experimental group, we chose the participation of specialists from different countries in the field of transport in the international congress on intelligent transport systems - ITS World Congress as an object of imitation. We believe that this event is the most typical fragment of professional reality, participation in which requires a modern specialist to possess the skills that make up intercultural foreign language communicative professional competence. These skills and abilities were practiced in the classroom, and during the business game, students had a unique opportunity to apply these skills in practice in a quasi-real situation, thus completing the process of forming elements of intercultural foreign language communicative professional competence (ITS World Congress, 2021).

All students were assigned roles. The five students with the highest scores on the pre-test served as committee members. Their function in the game was to listen to the reports of the participants, draw up criteria for evaluating the speakers, organize and conduct a discussion of the reports, and announce the winners. The remaining students represented various transport companies and their function was to present the most interesting innovative proposal in the field of transport systems at the congress.

The business game scenario consisted of the following steps:

1. Participants study the materials of the Congress on Intelligent Transport Systems for 2020 and 2021 (ScienceDirect, <https://www.sciencedirect.com/>), choose the most interesting proposal from their point of

view and prepare their report using this proposal as a basis. At the same time, they can change it, add something, so that as a result they present their unique project on transport systems.

2. Each team of participants prepares an essay, which is checked by the teacher. After that, the participants correct their errors making the necessary adjustments.
3. Each team prepares an oral report and presents its proposal at the congress.
4. The committee listens to the report, asks questions.
5. The committee deliberates and decides who is the winner based on the criteria developed by the members of the committee.
6. All participants in the business game gather at a round table and discuss the results of the game.

An example of a task in English and Russian:

We hope for the better situation after the world recovers from the pandemic. People will travel everywhere and become mobile, but the mobility should be greener and more innovative. That is why today you are supposed to surprise us with your ideas for the world's major metropolitan areas supported by intelligent transportation systems.

Мы надеемся, что после того, как коронавирусная пандемия утихнет, люди опять захотят быть мобильными, но, возможно, они захотят другую мобильность – более экологичную и более удобную. Поэтому целью конгресса в этом году является рассмотреть всевозможные варианты по изменению транспортной инфраструктуры крупных городов мира и выбрать наиболее полно удовлетворяющие следующим требованиям: мобильность должна быть простой, быстро доступной, безопасной для здоровья людей и окружающей среды и удобной для всех, с активной опорой на развитие инновационных интеллектуальных транспортных систем.

An example of a fragment of the report in English and Russian:

We are inventing an immediate access to a mobility service that is no longer than three minutes away. Our aim is unparalleled electromobility, motor scooters, scooters, bicycles, ride-sharing and vehicle-sharing for cars. Public will be complemented with transport on the last mile and that is new on-demand services.

We are massively developing the ITS-strategy and our goals for 2035, and our intention is to take advantage of the opportunities offered by

digitalization which will protect the climate and contribute to the mobility transition.

This is how we will make our city a model city for the smart mobility of the future. This is already proving true in many successful ITS-projects in our city, which we would like to present to our citizens and the guests of the ITS World Congress.

Мы разрабатываем систему быстрой мобильности, когда в любом месте города его житель может воспользоваться доступом к нужному ему виду транспорта и потратить на это не более 3 минут. С этой целью развиваются транспортные сети и вместимость автобусов, метро и поездов. Мы поддерживаем электромобильность, райдшеринг и совместное использование транспортных средств для автомобилей, мотороллеров, скутеров и велосипедов, а также новые услуги по требованию пассажира, которые дополняют общественный транспорт на последней миле.

Мы продолжаем развивать ИТС-стратегию и формулировать наши цели на 2035 год, и мы хотим использовать возможности, предлагаемые цифровизацией, для защиты климата и содействия переходу на систему мобильности транспорта. Тогда мы сможем сделать наш город образцовым городом с умным транспортом. Мы уже доказали свою состоятельность в этом вопросе и хотим представить вашему вниманию несколько успешных проектов интеллектуальных транспортных систем.

Examples of winning projects:

1. HYPERPORT CARGO SOLUTIONS.

Развитие и маркетинг гиперпорта.

One of the teams opted for a proposal to use an innovative transport system for standard ship containers for cargo transportation in order to reduce the load on traffic. Students were attracted by the original design of containers, the organization of cargo delivery and the developed infrastructure. The hyperport operates on the principle of a light metro and delivers goods throughout the city almost instantly. This team represented Hamburger Hafen, Logistik AG (HHLA) and Hyperloop Transportation Technologies (HTT) (ITS World Congress, 2021).

2. DRONES FOR URBAN IMPLEMENTATION. Дроны для городского транспорта.

In this project of partner companies HSU, BWI, DLR, WPS GmbH, NXP, HHLA Sky GmbH, Third Element Aviation GmbH, consider it GmbH (ITS World Congress, 2021), students were attracted by the concept of further development of the drone

system for both cargo delivery and passenger transportation.

The results of the final control of the training experiment reflected the effectiveness of passing the topic "Participation in the Congress on Intelligent Transport Systems" in the form of a business game, which was confirmed by a higher level of knowledge and skills of the students of the experimental group. According to the test results, the difference between the level of knowledge and skills in the experimental and control groups is 35-42%.

We believe that such an increase in skills and knowledge when teaching students using a business game was caused not only by the presence of a real professional learning context, but also by the creation of a favorable psycho-emotional background during the business game, which reduced stress, increased the participants' interest in the final result of the educational process. and, in general, significantly increased the learning motivation of students. To confirm this assumption, we determined the level of stress resistance of the participants in the experiment before and after the experiment.

For this purpose, students answered the questions of the stress resistance self-assessment test (ScienceDirect, <https://www.sciencedirect.com/>). The students were given statements about their well-being and feeling of comfort. For example, how well do they control their irritation if something gets out of their control; whether they believe they are confident in self-control and able to solve their personal problems; how they evaluate their success in studies and in personal affairs, etc. Respondents rated their answers with points from zero to four. The points obtained were summed up and divided by 10. If the stress resistance is excellent, the indicator is 0.5; if stress resistance is good - 6.8; if stress resistance is satisfactory - 14.2; if stress resistance is weak - 24.2; if stress resistance is very weak - 34.2 (ScienceDirect, <https://www.sciencedirect.com/>).

4 CONCLUSIONS

As a result of participation in the business game, the majority of students increased stress resistance, which confirms that the participants in the business game felt themselves in a favorable stimulating atmosphere during training.

We also conducted a survey to find out whether students liked learning in the form of a business game. The students stated that learning in the form of a business game motivated them to be more active

in preparing for classes and found it more interesting than traditional forms of learning.

In conclusion, it can be stated that the participants in the business game were better motivated than the students who studied according to the traditional method and showed better assimilation of the material on the topic being studied. At the same time, the preparation and conduct of the business game required a lot of effort from the teachers. Based on the results of the training experiment and the survey, we came to the conclusion that teaching a foreign language using business games increases the effectiveness of learning but should be used primarily to study topics that require imitation and modeling of professional communication situations for their assimilation.

REFERENCES

- Perfilova, G. V., 2011. *Exemplary program in the discipline "Foreign language" for the preparation of bachelors (non-linguistic universities)*. p. 30.
- Liakhova, E. G., Danilova, V. I., Dushina, I. V., 2020. Educational business game "English Pub" as an effective tool for the formation of professionally oriented intercultural competence in teaching English to future specialists in the hotel and restaurant business. *The world of science. Pedagogy and psychology*. 6.
- Liakhova, E. G., Fedotkina, E. V., 2021. Formation of professional foreign language competence by identifying the national cultural code of rail travel. *Modern Science: Actual Problems of Theory and Practice. Humanitarian sciences*. 9/2. pp. 52-57.
- Liakhova, E., Moroz, N., 2020. Russian culture code research educational game as a tool to enhance professional English language training of future PR specialists. *INTED2020 Proceedings*. pp. 140-149.
- Quan, Z., 2014. Motivation for a Second or Foreign Language Learning. *SHS Web of Conferences*. 6. 04004.10.1051/shsconf/20140604004.
- Riyanti, D., 2019. The role of motivation in learning English as a foreign language. *Journal of English Language Teaching Innovation and Materials*. 1. 29.
- Official website of the conference ERTICO. ITS World Congress. 2021. <https://itsworldcongress.com/>.
- Official website of ScienceDirect. Stress-Assessment – an overview. <https://www.sciencedirect.com/topics/medicine-and-dentistry/stress-assessment>.