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Review research paper

MOTIVATING POTENTIAL OF PROFESSIONALLY-ORIENTED FOREIGN LANGUAGE PROJECT ACTIVITIES

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Abstract. *The paper examines the issues of using project-based learning in teaching foreign languages (FL) at the Bauman Moscow State Technical University, as a combined educational strategy with high potential for creating a favorable educational environment and promoting students' involvement in the educational process. The aim of the research is to develop effective methodological procedures using a differentiating approach to teaching students with different levels of foreign language competence, various psychological and motivational attitudes, and inclinations. To achieve this goal, we developed and implemented a number of methods based on project strategies as part of the FL course and conducted a survey aimed at identifying changes in motivation to learn languages. A team role assignment technology has been designed and described in detail for the project "Production in Space" with an eye to its potential use in other projects. The principle of changing functional roles for subsequent project works has been embodied in the role change matrix.*

Key words: *project activities, educational environment, motivation, motivating potential, team roles*

1. INTRODUCTION

Russian science and industry has recently faced the problem of the brain drain of highly qualified engineering personnel. Therefore, the replenishment of intellectual assets to ensure technological sovereignty raises the question of training a necessary number of highly qualified specialists in key areas of science and the real sector of the economy. The training of such specialists begins with the education system (Asadullin and Galeev 2023). The reality today is that in order to promote the membership in professional community, especially on the international level, young specialists must be fluent in English as a lingua franca. In fact, proficiency in one or more foreign languages (FL) gives engineering graduates the opportunity to participate in international scientific and practical conferences and present their own ideas in scientific and technical articles (Margaryan et al. 2021), (Gurova, Reznik, and Shafikova 2018). Such activity provides students with the necessary awareness of future prospects which can bring tangible benefits, and help stimulate motivation for persistent FL study, which implies the ability to apply the acquired knowledge and skills on practice (Spirovska 2017).

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However, our observations show that quite a number of future engineers are not highly motivated to study FL for different reasons. Some of them lost their interest and got unmotivated in secondary schools, others lack confidence in their language aptitudes, etc. Therefore, the problem of creating more motivating educational environment makes teachers experiment with various learning techniques and methods in search of optimal ones, providing the ability to generate, interpret and operate professional information in a foreign language (Trubitzina, Kubacheva, and Baeva 2022) because the educational environment can both motivate students and demotivate them (Rubic and Matijević 2019).

Modern pedagogical practices suggest applying technical achievements, such as online resources and platforms (Titova and Staroverova 2023), electronic course designers (Dimitrienko, Gubareva, and Chebakov 2019), mobile phones (Martin 2021). Particular attention is paid to the opportunities provided by artificial intelligence (Kusumastuti 2023). All these technologies undoubtedly foster more engaging and effective language learning practices for students.

Another strategy, aimed at increasing students' motivation, is the flipped classroom model. It makes students more involved in the process of pre-class material study and analysis, and releases time for in-class activities by raising questions and their group discussions (Gromoglasova et al. 2022), (Zain 2022), (Abdullah et al. 2021).

Learning materials are also regarded as an incentive-fueled factor. Students' skepticism of the material significance decreases motivation (Lee 2023). Perhaps, nothing can so reduce the attractiveness of the academic process as information-wise obsolete sources. This is why higher education teachers must not only utilize genuinely interesting, engaging materials in the training program, but also be prepared to independently create educational content in accordance with the students' professional interests and needs.

Psychological factor can be recognized as another motivation driver. It is not a secret that FL learners may suffer from language learning anxiety (Balakrishnan, Abdullah, and Khoo 2020), (Yılmaz, Babatürk, and İnalöz 2023) which could dramatically affect their achievements. FL instructors must take into account the needs of their learners and design lessons and learning materials which are less anxiety-provoking. This is in line with the view of Wu (2010) who suggested that it is the teachers' duty to create a less threatening atmosphere, motivate, and strengthen student confidence and that the students who are more motivated tend to be more successful language learners (Balakrishnan, Abdullah, and Khoo 2020).

Students' engagement is directly related to motivation: the more the student is engaged the higher his/her motivation is. Greater involvement in the university educational environment implies increasing not only extrinsic motivation, caused by the system of reward and punishment, but intrinsic, based on students' own desire to study, too (Messerer, Karst, and Janke 2022). Therefore, the best learning environment increases the degree of students' engagement which shifts educators' focus towards what the student but not the teacher does (Akbari et al. 2016). Using the main principles of Socratic method forces students to communicate in a "cooperative manner" by exchanging and discussing ideas "completing one another" (Stojković and Zerkin 2023).

Project-based learning (PBL) is believed to combine all the revealed approaches to the problem of increasing motivation. It helps students to play an active role in the educational process by building their own knowledge and using it in practice (through project activities), which increases both extrinsic and intrinsic motivation (Shin 2018). Project work (PW) also takes into account the personality traits of students (extraversion,

conscientiousness, etc.) in order to involve them in the project at its different stages and promote development of soft skills including responsibility, initiative, and problem-solving (Dogara et al. 2019). The flipped classroom techniques are typical for PBL as various stages of the problem-solving process inspire students to look for and analyze the necessary information beforehand (Tawfik and Lilly 2015). Moreover, being digital natives, i.e. fluent with modern technologies, students learn to treat them as a means of achieving results needed (Bell 2010). Participating in PW enhances students' cooperation skills as they collaborate with their educators and groupmates on the project structure and procedure to achieve the goal (Lasagabaster and Beloqui 2015). Collaboration of such kind facilitates learners' attentiveness to the class activities and relevance of the learning materials used (Shin 2018). Participation in the work of a small group in solving a specific real problem, gaining personal experience is a strong motivator and allows you to make the choice of a profession justified (Alexandrov et al. 2021). Such a team environment assumes that each member consciously addresses the performance of their functions and informally approves, understands the role and functions of the teammates.

In our research, we consider justified role assigning as one of the key factors determining the effectiveness of PW. To make the right choice or assignment of the role both the current level of FL proficiency and the personal traits of the students should be taken into account. In addition, the basic idea of the research lies in the fact that the internal desire to learn FL will grow in future engineers owing to the emergence of a synergistic effect when the overall result is higher than the sum of the contribution of individual team members (Nikolaeva and Borodina 2021).

The study's working hypothesis suggests that participation in projects involving the distribution and rotation of team roles from one project to the next has an impact on the quantitative evaluation of engineering students' motivation for learning a foreign language.

2. Data Collection and Research Methods

The study involved 69 first-second-third year students of the departments of Mechanical Engineering and Special Machinery. The survey was conducted by the Motivation questionnaire comprising preliminary surveys before the project and follow-up surveys after the project class activities. It consisted of 12 questions which can be categorized into 4 main groups: professional motives (questions 1-3), academic motives (questions 4-6), personal motives (7-9), and integrative motives (10-12). Students were asked to rate simple statements on a five-point Likert scale, based on their personal views: 5 points for strongly agree, 4 points for agree, 3 points for neither agree nor disagree, 2 points for disagree, and 1 point for strongly disagree. This scale was used to determine the level of agreement or disagreement. The Alpha Cronbach test was performed to check the reliability of the scales. Its value for the entire set of statements was 0.73 showing good alpha ratings for four dimensions, as they are above 0.60.

After the survey was completed, each item was calculated both separately and summed to create a score for a group of items on the four categories mentioned above. The average mean was specified on a scale from 1 to 5. The same was done for each group of motivation.

To measure potential post-project changes a paired *t* test was applied involving the same groups of students. The data were valued by means of *t-criteria*, standard deviation (SD),

degree of freedom (*f*) and *p-value*. The results of the paired *t*-test are shown in Tables 5 and 6. The conclusion about statistically significant changes was made for the cases when an observed value was higher than a critical one with *p- value* being lower than 0.05.

3. TEAM ROLES AND STRUCTURE OF THE PROJECT

Selected example of implementation of a short-term student project on the topic "Production in Space" studied in the course of English for engineers (Borodina, Kalugina, and Margaryan 2019) is briefly presented in the paper. The overall goal of the project was to propose and justify a new experiment on board the International Space Station. For the final result, the teams were to prepare an oral presentation in English providing the overview of previous successful experiments and proof of the future experiment viability in order to win financial backing from investors. The project work lasted five weeks (Module) and consisted of three phases:

1. Introduction
2. Search and Research
3. Project defense

Before the project started the students were assigned different roles whose combination might provide synergy with a greater effect from the performance as opposed to independent work. We suggested applying the team roles classification proposed and described by Meredith Belbin (Cambridge University) used by firms' managers for forming teams of employees, in order to successfully achieve the goals (Belbin 2011). The results of modifying it for the academic tasks with the description of team roles and personal traits needed to play them are presented in Table 1.

Table 1 Project team roles

Role	Behavioral style
Innovator	Creative, imaginative, free-thinking, generates ideas and solves difficult problems. Active in the classroom, always participates in the discussion of problematic issues.
Resource Investigator	Can search, process information needed for the project, draw conclusions. Avoids participating in conversations, but is distinguished by efficiency.
Coordinator	Mature, confident, focused on the team's objectives, can debate or argue reasonably.
Monitor / Evaluator	Evaluates suggestions, corrects errors, and edits. Knows grammatical rules, a good speller.
Completer / Finisher	Responsible, "perfectionist", keeps to a precise schedule. Performs well on written assignments.

At first, organizational and preparatory stage - Introduction, students were invited to participate in the project. During this stage they became familiar with the project task and were divided into teams, each having 4-5 participants. The stage included announcement of the topic, project description, and rules; setting the main goal of the project, recommendation for gathering information, and giving Task 1. Table 2 shows the project description denoting the contribution of each role-member into the project fulfillment and linguistic areas trained during its preparation and implementation.

Table 2 Project description

Role	Functions and responsibilities in the PW	Linguistic areas
Resource Investigator	Collects material about already conducted experiments and about a new experiment and passes it to the Monitor – Evaluator (Task 1).	▪ intensive FL reading ▪ critical thinking (active analyzing, assessing, synthesizing, evaluating and reflecting on information gathered)
Monitor – Evaluator	Checks the information selected by the Resource Investigator and revises it for oral presentation. The edited information is passed to the Coordinator	▪ linguistic analysis of the text ▪ categorizing and structuring information
Coordinator	The coordinator prepares a template based on the sample (see Table 3), which will be presented later during the project defense.	▪ synthesizing FL information ▪ FL monologues and dialogues ▪ reasoning
Innovator	Responsible for Task 2. Offers ideas for an experiment, prepares theses on the issues that will be presented during the defense of the project, analyzes possible responses of opponents, prepares responses.	▪ using the previously generalized information to create a new text product based on it ▪ FL monologues and dialogues ▪ reasoning
Completer – Finisher	Prepares project visualization in the presentation format - Task 3 (headings, notes to the slide, photos, graphics, videos, interactive objects)	▪ categorizing and structuring information ▪ creative writing in a FL

To proceed further to the Search and Research stage, students completed Task 1 involving scrutiny of two or three already conducted experiments with products/materials production in space. The following roles were actively involved at this stage:

- The Research Investigator selected the necessary information sources and conveyed them to the Monitor/Evaluator;
- The Monitor/Evaluator edited the material collected, evaluated it for the compliance with the project topic, and passed the edited version to the Coordinator;
- The Project Coordinator (with the help of a teacher) prepared a template for his/her Team, which might contain the following items – what was produced, how it was used in the Earth conditions, what advantages of materials/products made in space had over those made on Earth (see Table 3).

Table 3 Template for Task 1

Objects of study (materials/products)	Made of/composed of	Application on Earth	Advantages
1. 2. 3.			

The next step in the project implementation was Task 2 which implied design of a new experiment. The students had to provide findings on the following questions:

- the proposed product to be made in space;
- the features and benefits of the product;
- the demand for this proposed product;
- the competition;
- necessary resources: finance, equipment, skills and expertise.

To perform this task, the project participants' roles joined with the Innovator being a leader.

The logical conclusion to the project was its Defense with presentation of the future experiment on board the space station (Task 3). The Completer/Finisher was responsible for project visualization.

Initially, when assigning roles, the teacher should take into account how well a particular role corresponds to the existing level of a student's language abilities. The risk is that if a student is unable to complete his/her task in the project, s/he may lose motivation or, even worse, become disillusioned with his/her own capabilities. However, with teamwork being effective during the first project, it is possible to swap the roles for the next ones so that different aspects of language abilities could be activated (see Table 4).

Within the framework of the learning process we consider assigning team roles as one of the main factors determining the motivating component of project activities.

Table 4 Role change matrix

1st project/role	Resource Investigator	Monitor – Evaluator	Coordinator	Innovator	Completer
Student 1					
Student 2					
Student 3					
Student 4					
Student 5					
2nd project/role	Resource Investigator	Monitor – Evaluator	Coordinator	Innovator	Completer
Student 1					
Student 2					
Student 3					
Student 4					
Student 5					
3rd project/role	Resource Investigator	Monitor – Evaluator	Coordinator	Innovator	Completer
Student 1					
Student 2					
Student 3					
Student 4					
Student 5					

At the end of the project defense, each team shared their feedback: students were asked to complete English motivation questionnaire.

4. FINDINGS

In order to investigate whether students` motivation to study FL changed after participating in the project, we conducted the paired *t* test and compared the total average scores of the pre-and post motivation questionnaires.

The results of the study are presented in Table 5. According to the table, the mean of the post-test is higher than that of the pre-test – 4.1 and 3.83 respectively. The *t*-value obtained from the survey equals 3.10, *p=< 0.05*. The *critical value* of the *t*-test for a given number of degrees of freedom *(f)* is 1.97. Thus, the observed *t-value* is bigger than the *critical t-value* (3.10 > 1.997), leading us to the conclusion that the changes are statistically significant.

Table 5 Pre-and Post-Project FL Learning Motivation

	Mean	Standard Deviation	N of respondents	f	t-value
Pre-motivation	3.83	0.56	69	68	3.10*
Post-motivation	4.1	0.42	69	68	

*p < 0.05

Taking into account the fact that the second research was conducted soon after completion of the project, we can conclude that participation in the project positively changed students' attitude to learning FL.

If the PW influences students' FL learning, it would be interesting to know what aspect of motivation has changed.

Table 6 Motivation Cluster

Aspect		M	SD	*t*-critical	*t*-observed
Professional motive	pre post	4.26 4.37	0.85 0.73	1.997	1.0
Academic motive	pre post	3.28 3.61	1.40 1.13	1.997	2.79
Personal interest	pre post	3.86 4.12	1.07 0.93	1.997	2.06
Integrative motive	pre post	3.99 4.18	1.13 0.98	1.997	1.41

*p < 0.05

As shown in Table 6, PBL has had an impact on some of the considered clusters, but not all of them. Difference between the means of items comprised in the Professional motivation 4.26 (pre) and 4.37 (post) indicates some growth, but statistically insignificant since the *t* critical (1.97) is higher than *t* received from the experiment (1.0). The same refers to Integrative motive (the pre-mean 3.99 versus post-mean 4.18) with *t*-observed amounting to 1.41, this value not allowing us to speak about some exterior factor influencing an increase in levels of motivation (at least, in the short-term). However, in case of Academic motive (the pre-mean 3.28 versus post-mean 3.61 with *t*-observed =2.79) and personal interest (the pre-mean 3.86 versus post-mean 4.12 with *t*-observed =2.06) we can notice statistically significant results concerning influence of the PBL on the growing interest to study FL as an important University subject and for personal purposes.

5. Discussion and Conclusion

The numerical results of the study support the major part of the working hypothesis. Project activities for FL teaching can serve as a promotional tool for creating a favourable educational environment since they have a positive effect on most motivation components.

Professional motivation presented the highest mean of all clusters with the leading score 4.5 for the statement "Knowing FL (English) increases my chances of getting a job". However, statistical analysis did not reveal a significant impact of the project on this component of motivation. We can assume that the reason why its value, though having grown on completion of the project, did not significantly change, lies in the fact that engineering students realize the role of the FL for their future job placement. In fact, the initial score was high enough for the learners of non-linguistic majors.

Similarly, the second valued item – Integrative motivation – did not indicate significance from statistical point of view, but in general has grown rather than diminished. It would be useful to conduct a longitudinal research to check if this component of motivation will improve as we continue implementation of PBL.

The cluster of Personal interest presented the third place mean pointing out to the students' interest in reading and listening to music in English. Besides, pre-and post-analysis revealed a change in students' attitude to learning FL. Thus, the average mean for the statement "I like learning English" rose from pre-mean 3.9 to post-mean 4.2, suggesting the idea that the students find the project-based environment more attractive than traditional classes.

At the first research stage students showed low Academic motivation. For example, the statement "I have to learn English because I don't want to get bad grades" earned only 2.6 and 3.2 points before and after the project respectively. Students do not confess that their motivation to study FL is based on the fear to get a bad mark. Their motives would seem to be more mature: language knowledge and associated prospects are more important than today's grades. Nevertheless, it is remarkable that Academic motivation results were significantly different in the pre- and post-tests marking the growth of motivation.

The research has helped identify the dominant motives in the structure of educational motivation after students' participation in project activities among professional, academic, personal, and integrative motives. The result of the study supports the idea that PBL causes students' more active involvement into a learning process changing all components of motivation, especially academic motivation and self-interest. We expect that professional and integrative motivation being initially quite high can grow more in the process of PBL in the long term. The quantitative growth of all motivation components, at the same time, demonstrated the increase in students' activity in the educational process as a whole. The use of all motivational strategies in conjunction with the "flipped classroom" approach has fostered an interest in the independent selection and, particularly, analysis of the study material, its topicality and significance; this approach has also uncovered the latent potential in students by demonstrating how they can combine their inherent skills in the use of computer technology and FL knowledge with their professional competencies. During PW, students gained some teamwork skills: the ability to share duties, delegate responsibilities, and debate or argue reasonably (Margaryan et al. 2021) owing to which their FL anxiety decreased.

To conclude, the obtained data on the motivation growth suggest that participation in the project and its successful implementation significantly affect the increase in interest

and progress in the FL study, and therefore, the project activity has a high motivating potential. Empirical evidence of our study allows us to predict that PW can have a long-lasting effect on engineering students' motivation to study FL due to the possibility to combine essential motivating strategies. So, we are planning to conduct a prolonged study aimed at verifying this point.

REFERENCES

Abdullah, Mohamad Yahya, Supyan Hussin, Zahraa Mukhlif Hammad, and Kemboja Ismail. "Exploring the Effects of Flipped Classroom Model Implementation on EFL Learners' Self-Confidence in English Speaking Performance." In *Studies in Systems, Decision and Control*, 223-241. Springer International Publishing, June 27, 2020. https://doi.org/10.1007/978-3-030-47411-9_13.

Akbari, Elham, Ahmad Naderi, Robert Simons, and Albert Pilot. "Student Engagement and Foreign Language Learning through Online Social Networks." *Asian-Pacific Journal of Second and Foreign Language Education*, Vol. 1, no. 1, (April 14, 2016). https://doi.org/10.1186/s40862-016-0006-7.

Alexandrov, A.A., Proletarsky, A.V., Selezneva, M.S., Neusypin K.A. "In-depth Form of Professional Orientation in Small Group with Advanced Training of Specialsits." *XLV Academic space conference, dedicated to the memory of academician S.P. Korolev and other outstanding national scientists-pioneers of space exploration*, Vol. 3, March 30, 2021: 149-152.

Asadullin, T.Ya., Galeev, I.G. "Student's individual professional potential development visualization." XLVII *Academic space conference, dedicated to the memory of academician S.P. Korolev and other outstanding national scientists-pioneers of space exploration*, Vol.3, January 24–27, 2023: 32-36.

Balakrishnan, Subatira, Nurlisa Abdullah, and Linda Khoo. "English Language Learning Anxiety and its Relationship with Language Achievement: A Study on Learners in a Technical University." *Journal of Technical Education and Training*, Vol. 12, 2020: 161-170. https://doi.org/10.30880/jtet.2020.12.03.017.

Belbin, Ron. "Management Teams: Why They Succeed or Fail (3rd Ed.)." *Human Resource Management International Digest*, Vol. 19, no. 3 (June 7, 2011). https://www.emerald.com/insight/content/doi/10.1108/hrmid.2011.04419cae.002/full/html?journalCode=hrmid. (11 January 2024)

Bell, Stephanie. "Project-based learning for the 21st century: Skills for the future". *The clearing house*, Vol. 83, No. 2, 2010: 39-43.

Borodina T.Yu., Kalugina L.V., and Margaryan T.D. *English in the digital age, Part 2, Students' book.* Moscow: BMSTU, 2019.

Dimitrienko Yu.I., Gubareva E.A., Chebakov D.A. "Design of Electronic Interactive Courses in NOMOTEX Digital Educational Environment." *Scientific Bulletin*, no. 11 (35), 2019: 10.

Dogara, Gimba, Sukri Muhammad Bin Saud, Yusri bin Kamin, Mohd Zolkifli bin Abd Hamid, and Mohd Safarin bin Nordin. "Developing Soft Skills through Project-Based Learning in Technical and Vocational Institutions." *International Journal of Recent Technology and Engineering (IJRTE)*. Blue Eyes Intelligence Engineering and Sciences Engineering and Sciences Publication - BEIESP, September 30, 2019. https://doi.org/10.35940/ijrte.a9803.098319.

Gromoglasova, T. I., Kovaleva, M.I., Koshkina, Zh. V., and Huffman, L. "The Flipped Classroom in the Context of Digitization of Educational Space: A Students' Perspective." *Journal of Siberian Federal University. Humanities and Social Sciences*, Vol.15, no. 9, 2022:1296-1309. https://doi.org/10.17516/1997-1370-0929.

Gurova, G. G., Reznik, S. V., and Shafikova, I. R. "New materials and developing English language competence in university students and teachers." *Journal of Physics: Conference Series*, Vol. 1134, no. 1, 2018: 012019.

Kusumastuti, Wuri Prima. "Artificial Intelligence in Language Education." *Conference: The Language, Regional, Expertise, and Culture (LREC) Program Teacher Professional Development*, At: Fort Liberty, North Carolina, (June 2023).

Lasagabaster, David and Raquel Lopez Beloqui. "The Impact of Type of Approach (CLIL versus EFL) and Methodology (Book-Based versus Project Work) on Motivation." *Porta Linguarum*, no. 23, 2015: 41-57. https://doi.org/10.30827/digibug.53737

Lee, Sangmin-Michelle. "Second Language Learning through an Emergent Narrative in a Narrative-Rich Customizable Metaverse Platform." *IEEE Transactions on Learning Technologies 16*, no. 6, December 1, 2023: 1071–81.-https://doi.org/10.1109/tlt.2023.3267563.

Margaryan, T., Ivanova, L., Nikolaeva, N., and Borodina, T. "Shaping skills of reasoning in ESP course at technical university." *Focus on Language Education and Research*, Vol. 2, no. 1, 2021: 14-22.

Martin, Daniela Roza. "M-Learning and the EFL Classroom." *BELT - Brazilian English Language Teaching Journal* 12, no. 1 (December 15, 2021): e39752. https://doi.org/10.15448/2178-3640.2021.1.39752.

Messerer, Laura, Karina Karst, and Stefan Janke. "Choose Wisely: Intrinsic Motivation for Enrollment Is Associated with Ongoing Intrinsic Learning Motivation, Study Success and Dropout." *Studies in Higher Education* 48, no. 1, September 21, 2022: 137–50.https://doi.org/10.1080/03075079.2022.2121814.

Nikolaeva, N.S., and Borodina, T.Yu. "Methods for developing gifted students` language aptitudes in technical university." *Philological aspect: International Journal of Research and Practice. Ser.: Methods of teaching languages and literature*, no. 04(07), 2021. (In Russian). https://scipress.ru/fam/a…nicheskogo-vuza.html (11 January 2024)

Rubic, Ivana, and Dora Matijević. "Autonomy and motivation: a self-determination theory perspective on ESP motivation." *Journal of Teaching English for Specific and Academic Purposes*, Vol. 7, no 2, 2019: 147-158.

Shin, Myeong-Hee. "Effects of Project-Based Learning on Students' Motivation and Self-Efficacy." *English Teaching*, Vol. 73, no. 1, 2018: 95-114.

Spirovska, Elena. "Enhancing employability skills in ESP (English for Specific Purposes) context–a study conducted at South East European University." *Journal of Teaching English for Specific and Academic Purposes*, Vol. 5, no. 2, 2017: 275-284.

Stojković, Nadežda, and Zerkin, Dmitriy G. "Pedagogy of Socratic method of teaching ESP." *Journal of Teaching English for Specific and Academic Purposes*, Vol. 11, no 2, 2023: 555-565.

Tawfik, Andrew A., and Lilly Christopher. "Using a flipped classroom approach to support problem-based learning." *Technology, Knowledge and Learning*, Vol. 20, 2015: 299-315.

Titova, Svetlana, and Maria V. Staroverova. "The stages of digitalization of language education in the XX-XXI CC." *Moscow University Bulletin Series 19 Linguistics and Intercultural Communication* 26, no.3, November 29, 2023: 25–45. https://doi.org/10.55959/msu-2074-1588-19-26-3-2.

Trubitzina, Olga, Kabiyat Kubacheva, and Tamara Baeva. "Improvement of the students' motivation in forming professional foreign language competence." *Journal of Teaching English for Specific and Academic Purposes*, Vol. 10, no 3, 2022: 421-429.

Wu, Kun-Huei. "The Relationship between Language Learners' Anxiety and Learning Strategy in the CLT Classrooms." *International Education Studies* 3, no. 1, January 14, 2010. https://doi.org/10.5539/ies.v3n1p174.

Yilmaz, Kürşad, Semih Babatürk, and Ahmet Buğra Inalöz. "The Relationship between University Students' Foreign Language Learning Motivation and Anxiety." *e-Kafkas Journal of Educational Research*, Vol.10, no 2, 2023: 271-284. https://doi.org/10.30900/kafkasegt.1280048.

Zain, Dodi Siraj Muamar. "Flipped Classroom Model For EFL/ESL Instruction in Higher Education: A Systematic Literature Review." *Journal of Language and Education*. National Research University, Higher School of Economics (HSE), September 30, 2022. https://doi.org/10.17323/jle.2022.12855.