## MEDICON AGRICULTURE & ENVIRONMENTAL SCIENCES Volume 4 Issue 2 February 2023

Review Article



Improving The Quality of Teaching Foreign Languages at The Stage of Transition of Technical Higher Educational Institutions of Turkmenistan to The Bologna System of Education

### Gurbanova Gulshat\* and Saparova Jahan

State energy institute of Turkmenistan, Bayramhan Street 62. Mary c., Turkmenistan

\*Corresponding Author: Gurbanova Gulshat, State energy institute of Turkmenistan, Bayramhan Street 62. Mary c., Turkmenistan.

Received: January 18, 2023; Published: January 23, 2023

#### **Abstract**

The article outlines a number of problems associated with teaching foreign languages in the specialty in technical higher educational institutions of Turkmenistan, and development of professionally oriented textbooks and teaching aids. A set of exercises and special level tasks for texts is proposed. Models of improving the quality of teaching foreign languages in technical higher educational institutions of Turkmenistan at the stage of transition to the Bologna process and educational activities held by the Department of Languages of the State Energy Institute of Turkmenistan are described. It is substantiated that the proposed models of educational activities for teachers will contribute to improving the language and professional competence of the students; retraining the teachers of foreign languages in a short time according to the educational program of a technical higher educational institution; introducing innovative pedagogical technologies in the educational process; creating high-quality textbooks in English, Russian, Chinese, German and Persian languages in the specialty for power engineers; using testing technology to control students' knowledge; creating language software and banks of test tasks in professional foreign languages.

*Keywords:* professionally oriented teaching, professional training, language competence, distance learning technologies, innovative teaching methods, language in the specialty, foreign language communication.

### Introduction

At present time, due to the large-scale cooperation of Turkmenistan with foreign countries, the need for specialists who are fluent in foreign languages in the specialty and have the appropriate ability to use literature in a foreign language as a source of information is increasing. The adoption of the Concept for Improving the Teaching of Foreign Languages in Turkmenistan has set new tasks for foreign language teachers of technical higher educational institutions. Development of educational programs in foreign languages, as well as textbooks and teaching aids corresponding to them, taking into account the specialties and areas of training of students, is one of the major tasks. Therefore, the relevance of the investigation is determined by the increasing requirements for the professional language training of students of non-linguistic higher educational institutions in Turkmenistan; lack of developed and tested textbooks on professionally oriented training of power engineers in foreign languages; necessity of educational and methodological complexes, including recommendations on the use of innovative pedagogical technologies for teaching languages in the specialty of future power engineers.

Nowadays, the Bologna system of education is being intensively introduced into the higher educational institutions of Turkmenistan. In connection with this, a great variety of activities are implemented on the inclusion of the higher educational institutions of our country into the rank of higher educational institutions of international level by 2024 according to the approved state plan; improvement of the standard legal acts on higher education, professional educational programs on the basis of the world science achievements and accumulated national experience; stage-by-stage transition to the two-level educational program (baccalaureate and magistracy) of training specialists at the higher educational institutions; activation of the participation of the higher educational institutions of Turkmenistan in the educational projects of European Union with the aim of upgrading the educational, scientific and methodological activities of the native higher educational institutions.

In terms of mentioned above, Turkmen higher educational institutions are expected to acquire international accreditation by 2024, to set up international academic activity of the students and teaching staff, to develop innovative methods of conducting educational and scientific works, to transit the conduction of the entrance exams to the higher educational institutions on the test format (2021-2024 years). Within the state plan, internet websites of the higher educational institutions were created; technical support of the internal system operating among higher educational institutions was upgraded successfully.

### Literature review

Currently, the problem of professionally oriented teaching of foreign languages in non-linguistic higher educational institutions is at the center of many scientific investigations. Analysis of investigations and publications on the methodology of teaching foreign languages in the specialty indicates that many works have been dedicated to the main problems of professional foreign language teaching and a great number of ways and means of solving them have been suggested. Thus, in work [1], the author outlines the main problems in the field of professional foreign language teaching and sees the solution to these problems in the profiling of teaching a foreign language to the students. The article [2] describes the components and stages of implementing the technology of professionally integrated foreign language teaching. The article [3] considers the problem of creating favourable conditions necessary for training students for professional activities in a foreign language class at a higher educational institution. The article [4] highlights issues related to plurilingual education of students, substantiates the expediency of its use in teaching a second foreign language in the conditions of intercultural communication. The article [5] considers a number of problems that impede the effective organisation of professionally oriented foreign language teaching in the training of students of the pedagogical higher educational institution for their future educational and communicative activities.

In addition, there are many textbooks and teaching aids compiled for professionally oriented foreign language teaching. For example, "Russian Language for a Future Engineer" by E.V. Dubinskaya, T.K. Orlova, L.S. Raskina and others [6], "Russian Language for Foreign Students" by T.E. Aroseva, L.G. Rogova, N.F. Safyanova [7], "Russian Language Textbook for Foreign Students Studying Geography" by L.V. Rychagov, M.N. Pronina [8], "Introductory Course in the Language of the Specialty "Construction and Road Machines" by E.I. Ivanova, T.K. Orlova [9], "Russian Language for a Future Economist" by E.V. Dubinskaya, L.P. Pai [10], Russian Language for Foreign Students "Language of Specialty: Biomedical Profile" by L.N. Borisova, L.L. Dubinina [11], collection of tasks in Russian for the textbook "Russian Language for Future Engineer" by A.Yu. Ageeva, V.G. Kasarova [12], Russian language textbook for foreign students in the discipline "Bridge Design" (T.K. Orlova, A.Yu. Ageeva) [13], a textbook on the Russian language for foreign students based on the course of informatics (A.Yu. Ageeva) [14], "Professional English in Use. Engineering" by Ibbotson Mark [15], "English for the Students of Energy Specialties" by A.L. Lugovaya [16], "English for Technical Universities and Higher Educational Institutions" by I.V. Orlovskaya [17], "English for Electrical and Mechanical Engineering" by Eric H. Glendinning, Norman Glendinning [18], "English Language. Professionally Oriented Course for the Students of the "Electric Power and Electrical Engineering" Area" by T.B. Lysunets, M.V. Netesova [19], "Oxford English for Electrical and Mechanical Engineering" by Eric H. Glendinning, Norman Glendinning [20], "English Language. Energy" by L.F. Chernyavskaya [21], "English Language Manual for Senior Courses of Energy Higher Educational Institutions" by M.E. Bakhchisaraitsev [22], "Technical English: Vocabulary and Grammar" by Nick Brieger, Alison Pohl [23], "English for Power Engineers" by E.V. Trukhan, O.N. Kobyak [24], "English for Environmental Engineers" by G.V. Ryabkova, O.I. Lefterov [25], "English Textbook for Technical Universities and Higher Educational Institutions" by I.V. Orlovskaya, L.S. Samsonova, A.I. Skubriev [26], "Energy Economics: Energy Demand and Supply" by I.A. Barkhatova, A.V. Nabiruhina [27], "Oxford English for Information Technology" by Eric H. Glendinning, John McEwan [28], "Oxford English for Computing" by Keith Boeckner [29], "English for Computer Users" by Santiago Remacha Esteras [30], etc.

Thus, at present, a considerable number of textbooks and teaching aids have been developed for various specialties of non-linguistic higher educational institutions. However, given the fact that English, Russian, Chinese, German, and Persian languages are taught at State Energy Institute of Turkmenistan, there is strong necessity to develop exemplary national textbooks for teaching languages in the specialty of power engineers.

### **Investigation and Results**

According to the Law of Turkmenistan on Education, the state, taking into account the increasing global social, environmental and economic interdependence, promotes the mastering of foreign languages by the citizens of Turkmenistan, including mainly the official working languages of the United Nations Organisation. The study of foreign languages is included in general and professional educational programs as compulsory subjects [31].

Also, according to the Law of Turkmenistan on Education, based on the purpose of educational programs and the specifics of the educational process, a foreign language (languages) can be used as the main language of instruction in professional educational institutions. Thus, in the State Energy Institute of Turkmenistan, the main language of training for the students of "Information Security Management" area is English. Therefore, in order to improve the knowledge of a foreign language (English) at a sufficient level and further assimilation of the educational program in a foreign language, students first take a language training or preparatory course for one academic year. The final positive certification of this course allows students to continue their education in the chosen educational program in English.

Therefore, at the stage of transition of the higher educational institutions of Turkmenistan to the Bologna Process, in order to improve the quality of teaching foreign languages in a technical higher educational institution, the following model has been chosen by us:

- 1. Organisation of a language training course at the proper level.
- 2. Creation of professionally oriented standard programs, as well as textbooks and teaching aids, taking into account specialties and training areas of the students.
- 3. Application of innovative teaching methods that meet the needs and abilities of future power engineers.
- 4. Teaching foreign languages by highly qualified, motivated teaching staff, which has appropriate language training, that is, linguistic knowledge and theoretical knowledge in the field of energy.
- 5. Organisation of additional courses on in-depth study of the foreign language in the specialty for the senior students of the technical higher educational institution.
- 6. Improvement of the systems and methods for evaluating quality of the education.
- 7. Implementation of educational programs for teaching foreign languages using e-learning and distance learning technologies.
- 8. Training students for the participation in the international subject Olympiads, in the scientific and practical conferences and various intellectual competitions.

### Organisation of a language training course at the proper level

At a language training course the students study English during one academic year. The preparatory year program aims to help the students transit from the secondary school system of learning to that of the higher educational institution, acquaint with the various academic disciplines taught at the higher educational institution, and integrate them into the higher educational institution environment prior to deciding on their future fields of study. The program also prepares the students psychologically for their prospective

fields of study in subsequent years. Furthermore, it offers intensive training courses to set students on the right track towards their professional careers and enrich their cultural background.

The program is designed for students who have completed a basic starter course in general English and who are ready for an elementary level. The elementary level program aims to introduce basic rules of grammar, as well as everyday vocabulary. The program also aims to introduce students to listening and reading for general understanding and some details, as well as speaking about themselves and their environment.

The pre-intermediate level course aims to help students with vocabulary building, grammar, reading short texts, recognizing information and opinions while listening, contributing to conversations, and elements of paragraph writing.

The intermediate level course aims to expose students to academic English skills such as essay writing, note taking, summarizing, and discussion. It also seeks to prepare students to be independent learners, capable of learning outside the class.

The preparatory year also includes teaching of Mathematics and Physics in English, as these subjects are an integral part of the technical higher educational institution curricula.

# Creation of professionally oriented standard programs, as well as textbooks and teaching aids, taking into account specialties and training areas of the students

Currently, the main problem associated with the teaching of foreign languages in the specialty (English, Russian, Chinese, Persian, German) in a technical higher educational institution that trains engineers for the country's energy industry is the lack of developed textbooks and teaching aids. Thus, at the State Energy Institute of Turkmenistan, students are taught in seven areas: Electrical and Heat Power Engineering; Mechanical Engineering; Electronics, Radio Engineering and Communication Systems; Management at the Technical Systems; Economy and Management; Information Security; Information Science and Computer Engineering. These areas include 18 specialties and 9 baccalaureate (undergraduate) areas of training. Consequently, depending on the specific specialty, the core of the educational material and the textbook is based on various texts on a particular specialty. This requires the purposeful selection of authentic texts for each specialty separately and the development of a set of tasks for them to be used at practical classes.

#### Application of innovative teaching methods that meet the needs and abilities of future power engineers

At present, we have developed trial textbooks and teaching aids in English and Russian for power engineers studying in various specialties and areas of training [32]. Specialty textbooks are also being developed for Chinese, German and Persian languages. Compiling textbooks and teaching aids, we focused on the principle of text-centrism. When compiling exercises and level tasks for authentic texts, we took Bloom's taxonomy as a basis (classical approach).

Level	Examples of the task conditions, compiled on Bloom's taxonomy
Knowledge	Read and memorize the terms. Define the key concept according to the interpretation. Match mea-
	suring instruments of various physical quantities with their definitions. Read and write down first
	antonymous pairs of words, then synonymous ones. Explain the meanings of words using special
	dictionaries. Pay attention to word building. Recognize key words in the text on the topic of the
	class, then write them down in a notebook and translate into Turkmen.
Understanding	Transform sentences on the structure "what is what". View a diagram describing the principle of
	operation of the condensing electric power station. Tell about the principle of operation of the
	condensing electric power station, the main and auxiliary equipment of the condensing electric
	power station. Write down and determine the type of subordinate clauses. Formulate questions
	for them.

Application	Give negative and affirmative answers using the information from the text. Justify your answer. Divide energy sources into two thematic groups. Answer the questions about the impact of the electric power stations on the environment, using a complex sentence with a reason clause in speech.
Analysis	Read the text and analyze the information. Complete the table with the examples of the advantages and disadvantages of the electric power stations. Prove that all the types of energy considered in technical thermodynamics, with the exception of heat, are the energy of the directed motion. Compare different types of energy and tell about their peculiarities.
Synthesis	Create a set of questions for a discussion on the topic "Are nuclear electric power stations necessary?" Divide into two teams. Solve the cases on the topic "Electric power substation" and present a mini-project.
Evaluation	What types of alternative energy sources are considered the most perspective? Evaluate them and justify the answer. Evaluate the projects of the solar electric power stations developed by the Scientific and Production Center of Renewable Energy Sources of the State Energy Institute of Turkmenistan. Answer the question: What are the perspectives of the solar electric power stations in Turkmenistan?

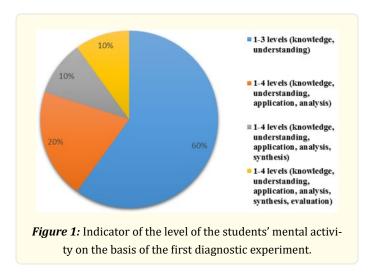
Exemplary conditions for the tasks on Bloom's taxonomy (on the material of the textbooks on Russian and English Languages for the students of the "Electrical and Heat Power Engineering").

Based on our own experience, we have revealed the effectiveness of textbooks developed on the basis of the authentic texts in the specialty and level tasks in Bloom's taxonomy when teaching English and Russian languages at our higher educational institution. The introduction of textbooks in the learning process was accompanied by such innovative technologies, methods of teaching foreign languages as project technology, case method, critical thinking development technology, discussion method, as well as gamification. Moreover, the application of these innovative technologies with a professional direction was discussed at weekly scientific and practical seminars organized by the experienced teachers of the Department of Languages. So, for example, to apply the gamification method, teachers created games of a professional orientation using information and communication technologies. Not only teachers were involved in the work, but also students who know the programming language, since the creation of applications and programs for games is a complex and painstaking process. The use of the project technology was implemented not only in the class, but also as an independent work of bachelors, since with the transition to the Bologna system, the educational program implies the inclusion of more hours for independent work of the students. This requires students to have information retrieval skills and activeness in the learning process. For the development of the students' critical thinking, problematic questions were placed in the textbooks: Are nuclear power plants necessary? Can biomass be considered as an alternative fuel source? Can the XXI century be called the century of the rational use of fossil fuels? Students were also asked to solve cases and present their mini-projects on the suggested technical topics.

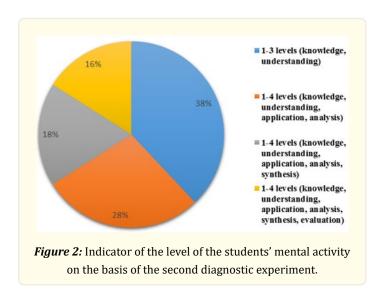
Before introducing the developed textbooks and innovative pedagogical technologies accompanying them into the educational process, we conducted a diagnostic experiment and found that most students only memorize the information received, but they cannot make meaningful value judgments about the studied material, state it in their own words, apply the acquired knowledge in a new language situation, divide the studied material into separate components, describe its internal organization.

Experimental training was carried out among the 2<sup>nd</sup> year students (100 students) studying in the "Electrical and Heat Power Engineering" area of the State Energy Institute of Turkmenistan, and a year later, a repeated diagnostic experiment was conducted in the groups under control. So, at the initial stage of diagnostics, 60% of the students could only assimilate and convey the content of the read text and the information received (levels of knowledge and understanding). 20% of the students were able to present the information received in their own words and apply it in the appropriate language situation, divide the studied material into separate components (levels of application and analysis). 10% of the students were able to effectively combine the acquired knowledge, form

new constructions from them (the level of synthesis). 10% of the students were able to make meaningful value judgments about the studied material, about new data related to the studied area (assessment level).



After the introduction of a set of training tasks on Bloom's taxonomy and textbooks developed on the basis of authentic texts, as well as with the concomitant use of innovative pedagogical technologies in the learning process, we revealed a positive trend. The number of students who are able to perform only tasks corresponding to the levels of knowledge and application decreased from 60% to 38%. The number of students who are able to perform tasks corresponding to the levels of knowledge, understanding, application, and analysis increased from 20% to 28%. The number of students who are able to perform tasks corresponding to the levels of knowledge, understanding, application, analysis, and synthesis increased from 10% to 18%. The number of students who are able to perform tasks corresponding to the levels of knowledge, understanding, application, analysis, synthesis, and evaluation increased from 10% to 16%. Thus, the need for the use of innovative pedagogical technologies and the development of professionally oriented textbooks in foreign languages in the specialty was identified.



# Teaching foreign languages by highly qualified, motivated teaching staff, which has appropriate language training, that is, linguistic knowledge and theoretical knowledge in the field of energy

There are no higher educational institutions in Turkmenistan that train teachers in professional foreign languages. In this regard, every new teacher of a foreign language who has started working at a technical higher educational institution faces certain difficulties in teaching students a language in their specialty. Accordingly, they have to retrain, or rather, combine not only linguistic knowledge, but also technical knowledge. At present, ready-made developed textbooks, educational and methodological complexes, presentations, video recordings of the experienced teachers' classes, created by the experienced teachers of the Department of Languages of the State Institute of Turkmenistan, in general, all electronic methodological material allows intensifying the process of retraining of trainee teachers. In addition to them, weekly scientific and methodical seminars are held by the experienced teachers of the Department of Languages, knowledge in the field of teaching foreign languages to non-philologists is updated, and mutual visits to classes are organised. Foreign language teachers also participate in the scientific and methodical seminars of other departments; get acquainted with new technologies in the field of energy, the principles of operation of electric power plants, and environmental problems associated with the operation of the energy facilities. This helps them to enrich their technical knowledge and make interdisciplinary communication in foreign language classes. They also take an active part in the monthly scientific and methodical seminars held among the foreign language teachers of the other technical higher educational institutions of Turkmenistan with purpose of exchanging experience and increasing proficiency level.

# Organisation of additional courses on in-depth study of the foreign language in the specialty for the senior students of the technical higher educational institution

Additional courses for a more in-depth study of foreign languages in the specialty are also organised at the State Energy Institute of Turkmenistan. It is in these courses that innovative pedagogical technologies find their full application. In these classes, due to an in-depth study of texts in the specialty, students learn to translate scientific and technical literature from a foreign language into their native language, prepare abstracts, scientific reports, and presentations on selected topics, participate in scientific round-table discussions and express their points of view in a professional foreign language.

### Improvement of the systems and methods for evaluating quality of the education

Improving the systems and methods for evaluating the quality of education is another important component of improving the quality of teaching a foreign language in a technical higher educational institution. At present, Turkmenistan is in the process of establishing a testing system in the field of education and digitalization of the education system, and test technologies are considered as one of the means of monitoring the level of subject achievements of the students. With this aim, at the scientific and practical seminars of the Department of Languages, research and foreign experience in the field of test technologies was studied and continue to be studied. Then, over the period of several years, teachers created banks of closed-type and open-type test tasks, which included addition tasks and free presentation tasks. These test tasks were subjected to the mathematical-static processing; their validity and reliability were checked, as well as the discrimination of the test tasks was calculated.

When developing the final test tasks in the Russian language, the second level (TPKU-II / B2) of the system of linguo-didactic testing in Russian as a foreign language was taken as a basis, which provides for testing the level of proficiency in practical Russian, adequate to the professional and social status of the tested person. Also, when developing test tasks for intermediate certifications, in order to diversify questions, the logical-semantic typology proposed by A.G. Shmelev, which contains 15 types of questions, was used:

- Factual questions: Where was the first nuclear power plant in the world put into operation?
- Personal questions: Who first discovered the phenomenon of electromagnetic induction?
- Cause-and-effect questions: Why is geothermal power plant not built in Turkmenistan?
- Functional-target questions: For what purpose are gas and steam cycles combined at the thermal power plants?

- Structural questions: What are the main installations of a nuclear power plant?
- Instrumental questions: How is a chain reaction carried out at a nuclear power plant? How can heat losses be reduced at thermal power plants?
- Circumstantial questions: Under what conditions did an induction current arise in a coil closed to a galvanometer in all experiments?
- Vocabulary-conceptual questions: What is rectification? How is the process of high-temperature processing of oil in order to obtain products of lower molecular weight called?
- Logical-deductive questions: What sectors of the economy will be damaged if oil reserves run out?
- Conceptual-associative task: Fill in the gap using a suitable verb.
- Conceptual and analytical task: What is common in the principle of operation of thermal power plants and nuclear power plants?
  What is the difference between a DC generator and a motor?
- Sequence or structure restoring task: Place the main equipment of the power plant in the correct sequence. Arrange the types of power plants in ascending order of their share in the world's electricity generation.
- Conceptual-semantic task: Find an antonymous or synonymous pair of words.
- Problem-solving task: Solve puzzles and find the key concept of the read technical text.
- Exclusion of the superfluous: Which of the following equipment is not included in the wind power plant?

With the transition to digital education, the institute created software to control students' knowledge. The test tasks that passed the test for validity and reliability were introduced into these special programs. Students attending intermediate evaluation come to special classrooms equipped with information and communication technologies and take tests. Based on the results of computer testing, attestation marks are given.

### Implementation of educational programs for teaching foreign languages using e-learning and distance learning technologies

Recently, in connection with the need to organise distance learning, a clause on the implementation of educational programs for teaching foreign languages using e-learning and distance learning technologies was included in the Law of Turkmenistan on Education. This contributed to the creation of electronic materials, teaching aids, as well as video recordings of lectures and practical classes in the disciplines. Video recordings of classes, electronic material for distance learning are placed in the electronic educational portal and made available using both the internal local network and the external one. In order to widen the ongoing work in the field of digitalization of the education system in Turkmenistan, the software "Electronic Library System" has been introduced into the electronic educational portal of the library of the State Energy Institute of Turkmenistan. The software "Electronic Library System" consists of two sections - manager and user. For the convenience of searching, all content is groupped into three sections (Accounting, Books, Students), which are displayed on the main page of the electronic library system and serve users of the general network. Students can use the electronic library system, which operates in the network connection of the institute, through their personal computers, as well as in the area of the Wi-Fi wave through their mobile phones.

# Training students for the participation in the international subject Olympiads, in the scientific and practical conferences and various intellectual competitions

Over the past ten years, students of the higher educational institutions of Turkmenistan began to participate actively in international subject Olympiads, in scientific and practical conferences and various intellectual competitions that require them to have a high level of knowledge of foreign languages in their specialty. For this reason, the institute has several circles on professional foreign languages, where students further improve their level of knowledge of foreign languages.

#### Conclusion

Thus, in the course of the investigation, we found that during the transition of the country's higher educational institutions to the

Bologna system, the following contribute to improving the quality of teaching foreign languages in a technical higher educational institution:

- Organisation of a language training course at the proper level;
- Creation of professionally oriented standard programs, as well as textbooks and teaching aids, taking into account specialties and training areas of the students;
- Application of innovative teaching methods that meet the needs and abilities of future power engineers;
- Teaching foreign languages by highly qualified, motivated teaching staff, which has appropriate language training, that is, linguistic knowledge and theoretical knowledge in the field of energy;
- Organisation of additional courses on in-depth study of the foreign language in the specialty for the senior students of the technical higher educational institution;
- Improvement of the systems and methods for evaluating quality of the education;
- Implementation of educational programs for teaching foreign languages using e-learning and distance learning technologies;
- Training students for the participation in the international subject Olympiads, in the scientific and practical conferences and various intellectual competitions.

The implementation of the above models makes it possible to improve the language and professional competence of the students; to retrain teachers of foreign languages in a short time according to the educational program of a technical higher educational institution; to introduce innovative pedagogical technologies into the educational process; to create high-quality textbooks for power engineers in English, Russian, Chinese, German and Persian languages in the specialty; to use testing technology to control students' knowledge; to create software and a bank of test questions in professional foreign languages.

#### References

- 1. EE Sukhov. Profiling of teaching students a foreign language as a factor in increasing their professional competence: Dis.... kand. ... cand. ped. Sciences: 13.00.01: Ryazan (2002): 180.
- 2. Professionally oriented education of non-linguistic students: international professional competitions | Vestn. Volume. State University (2021): 464.
- 3. Experimental verification of the methodology for the formation of intercultural competence in a professionally oriented information educational environment of the university | Vestn. Volume. State University (2021): 464.
- 4. Plurilingual teaching of a second foreign language to students from Southeast Asia | Vestn. Volume. State University (2021): 465.
- 5. AA Kolesnikov. How to teach a foreign language to students of a pedagogical university: actual problems and possible solutions | Vestn. Volume. State University (2021): 462.
- 6. EV Dubinskaya, TK Orlova and LS Raskin [i dr.]. Russian language for a future engineer. A book for the student: a textbook on the scientific style of speech for foreign citizens (pre-university stage). 7th ed., ster. Moscow: FLINTA (2013): 399.
- 7. TE Aroseva, LG Rogova and NF Safyanova. Scientific style of speech: technical profile. Russian language manual for foreign students. M (2010).
- 8. LV Rychagov and MN Pronin. Textbook on the Russian language for foreign students studying geography. M.: MADI (2014): 44.
- 9. EI Ivanova and TK Orlov. Construction and road machines: an introductory course in the language of the specialty "Construction and road machines" for foreign students of the preparatory faculty: textbook. M.: MADI (2016): 76.
- 10. EV Dubinskaya and LP Share. Russian language for a future economist: A textbook on the scientific style of speech for foreign citizens (pre-university stage): A book for a student. Part 1 / MADI (GTU). M (2007).
- 11. LN Borisova and LL Dubinin. Specialty language. Biomedical profile. Initial stage: textbook. manual on the Russian language for foreign students. M.: MADI (2017): 88.
- 12. AYu Ageeva and VG Kasarova. Collection of tasks in the Russian language for the textbook "Russian language for a future engi-

- neer" / MADI. M (2012): 97.
- 13. TK Orlova and AYu Ageeva. Textbook on the Russian language for foreign students in the discipline "Design of bridges" / MADI (GTU). M (2008): 206.
- 14. AYu Ageeva. Textbook on the Russian language for foreign students based on the course of informatics. Initial stage / MADI (GTU). M (2007): 51.
- 15. Law of Turkmenistan on education.
- 16. Ibbotson Mark. Professional English in Use. engineering. Cambridge (2009).
- 17. AL Lugovaya. English for students of energy specialties. Moscow (2009).
- 18. IV Orlovskaya. English for technical universities and universities. Moscow (2006).
- 19. Eric H Glendinning and Norman Glendinning. English for Electrical and Mechanical Engineering. Oxford, UK (2014).
- 20. TB Lysunets and MV Netesova. English language. A professionally oriented course for students of the direction "Electric Power and Electrical Engineering". Tomsk (2012).
- 21. Eric H Glendinning and Norman Glendinning. Oxford English for Electrical and Mechanical Engineering. Oxford, UK (2014).
- 22. LF Chernyavskaya. English. Energy. Bratsk (2011).
- 23. ME Bakhchisaraitsev. English language manual for senior courses of energy universities. Moscow (2009).
- 24. Nick Brieger and Alison Pohl. Technical English: Vocabulary and Grammar. Summertown Publishing, UK (2006).
- 25. EV Trukhan and ON Kobyak. English for power engineers. Minsk (2011).
- 26. GV Ryabkova and OI Lefterov. English for Environmental Engineers, Kazan (2016).
- 27. IV Orlovskaya, LS Samsonova and AI Skubriev. English textbook for technical universities and universities. Moscow (2006).
- 28. IA Barkhatova and AV Nabiruhina. Energy Economics: Energy Demand and Supply. Publishing House of St. Petersburg State University of Economics (2015).
- 29. Eric H Glendinning and John McEwan. Oxford English for Information Technology. Oxford University Press (2002).
- 30. Keith Boeckner. P Charles Brown. Oxford English for Computing. Oxford University Press (1998).
- 31. Santiago Remacha Esteras. infotech. English for computer users. Cambridge University Press (2008).
- 32. Saparova JA and Akmyradov GG. Russian language. For students of technical universities. A.: Ylym (2020): 396.

### Volume 4 Issue 2 February 2023

© All rights are reserved by Gurbanova Gulshat., et al.