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**FOREIGN LANGUAGE FOR INTERDISCIPLINARY STUDIES IN
THE DIGITAL AGE**

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Abstract

The article reveals the main causes and directions of innovative processes in the system of professionally oriented linguistic education for specialties with interdisciplinary character in the digital age. We indicate the conceptual guidelines for designing a foreign language course for the “Economic security” bachelor degree program, they are 1) interdisciplinary orientation of specialties; 2) the growing role of multimedia technologies in business and educational spheres. The main components of the course, which involves vocabulary, grammar, and translation tasks for special purposes, are determined. The necessity of the creation of autonomous didactic blocks in lexical and grammatical sections of the course is proved. We represent the results of approbation of the textbook, which is aimed at the development of skills of professional communication through a system of lexical, phonetic, receptive, reproductive and productive communicative exercises to professionally-oriented texts. We analyze the problems of organization of the course, involving a combination of traditional and e-learning tools for the successful preparation of students to 1) work with different types of information sources in a foreign language; 2) study the latest achievements in the professional field at the international level; 3) find the necessary materials in electronic resources. We study the specifics of hybrid teaching of linguistic disciplines associated with the integration of traditional and multimedia technologies. We also analyze the results of the approbation of an interactive online professionally-oriented grammar textbook.

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1. Introduction

The diversity of views and opinions on the goals, content, and methods of teaching with the use of Information technologies and online textbooks in the digital age can be considered as the evidence of academic pluralism and creative attitude to the work of teachers involved in the implementation of new educational programs. The problem of combination of traditional and e-tools for linguistic studies, and language learning is widely covered both in Russia see e.g. (Alexandrova, 2019a; Gerasimova & Makarova, 2017; Begeneva, 2010; Ilina, 2017; Kopylovskaja, 2017; Kashhuk, 2017; Evdokimova, 2017; Chepyzhov, Aleksandrova, & Timokhov, 2018, etc.), and abroad (Bassy & Séré, 2010; Berenguer, 2015; Beaupré et al., 2013; Capelli, 2003; Dudeney, Hockly, & Pegrum, 2013; Levine, 2003; O'Reilly, 2005; Roussel, Lemieux, Landry, & Samson, 2017; Thompson, 1998, etc.).

2. Problem Statement

Nowadays, the development of the ability to speak a foreign language is an integral part of higher professional education. Professionally oriented language training requires innovation and modernization. The sources of innovation and modernization are different, they can be artificial, planted from above, and natural, due to the dynamically changing reality and the requirements of the contemporary society that form the goals of education.

Evdokimova (2017) notes:

The main source of innovative processes in the field of education is primarily a change in the social demand of the community about education. It is known, that such terms as globalization, Informatization, the transition to the post-industrial society, etc. are used to characterize the state of modern society. Instability and dynamism of ongoing social and technological processes and situations become the main attributes of present days (p. 48).

3. Research Questions

The purpose of the combination of traditional and online textbooks in teaching linguistic disciplines at University is to prepare a specialist with all the necessary communicative skills in the professional real and digital space. This goal causes several tasks related to the change of approaches to foreign language teaching. The main changes are caused by the need to take into account the specifics of specialties with an interdisciplinary focus, as well as by the need for hybridization of teaching process associated with the integration of traditional and multimedia technologies. The question of what an online textbook should be to meet the modern requirements and guarantee the quality of education remains to be the main issue when selecting the educational materials.

4. Purpose of the Study

The purpose of the study is to determine the conceptual innovation and transformation guidelines necessary for the designing of the course aimed at the development of necessary skills of professional

communication, and use of information sources, contributing to the formation of new free initiatives to find professionally-oriented materials in electronic sources, as well as to create new texts on professional topics in compliance with foreign language lexical and grammatical norms.

5. Research Methods

The research methodology is a systematic combination of empirical and theoretical methods. In the course of the study, an experiment related to the development and testing of a professional language course for the specialty with an interdisciplinary nature, combining traditional and multimedia technologies, was conducted. The study represents the results of the approbation of the textbook considering the interdisciplinary nature of the specialty and the results of the experiment (namely educational and didactic opportunities and the effectiveness) of the use of online textbook when teaching the second-year students of the faculty of Economic security. The study of the effect of the introduction of the new course was conducted by a questionnaire. Quantitative, descriptive and comparative methods are used to systematize and analyze the results.

5.1. The specifics of the development and approbation of the textbook considering the interdisciplinary nature of the specialty

The choice of textbooks on linguistic disciplines for non-linguistic specialties at University has always been and remains to be a problem. A wide range of textbooks offered by well-known publishers often meets educational needs only to some extent, as they have, as a rule, general orientation, offering topics relevant to the context of certain specialties (for example, Business, Law). These textbooks can be successfully used with the first-year students in the framework of linguistic disciplines when the students are just trying to gain and systematize the basic material of their specialty while learning the bases of their future profession in the native language.

When teaching a foreign language of professional communication, it is not easy to find the appropriate and adequate materials with an interdisciplinary character. For example, the specialty “Economic Security” is directly related to both legal and economic aspects, as well as public administration. The need for new training materials is since important aspects of the professional activities of future graduates, such as economic security, as well as various areas of economic crime, are often ignored in the existing textbooks.

The course involves professionally-oriented vocabulary and grammar tasks. At the end of the course, the graduates get a foreign language proficiency level, which would be sufficient to solve communication problems in the course of the main professional activities.

Obtaining all the necessary skills, graduates will be able to continue their education in foreign universities abroad, successfully conduct scientific work in the professional area, freely communicate and exchange experience with foreign colleagues and partners. The knowledge of a professional foreign language is important because the working competitiveness in this professional area is constantly increasing.

The survey conducted among the 2nd year students showed that the majority of students are aware of the importance of obtaining the necessary communication skills in the field of professional communication.

A big number of participants noted that not only the personality of the teacher is important but also the quality of materials and techniques that should be selected carefully.

In most cases, when training the specialists whose field of activity is at the junction of specialties, the teachers have to deal not only with the development of educational programs but also with the creation of methodological materials that correspond to the level of their students, and topics studied within the scope of disciplines of the professional cycle.

The teachers have also take into account the number of hours allocated for the discipline, and in some cases, the preferences of the audience. The interdisciplinary status of the specialty “Economic security” predetermines the fact that the challenges that the developers face, when creating the textbook, can be solved only after:

- familiarization with the curriculum of the specialty;
- consultations with professors of specialized disciplines;
- study of scientific and specialized literature in the specialty.

Thus, as a result of the study, the following chapters were included into the lexical section of the course (Alexandrova, Gavrish, & Muravykh, 2019c): “National Security”, “Economic Security”, “Economic Crimes”, “Cybercrimes”, “Corruption. Ethics and Compliance”, and “Money Laundering”.

The authentic character of the materials of the manual, as well as the use of the international approach, allows students to expand their understanding of the standards, principles, and approaches existing in the field of economic security in different countries of the world. Familiarization with international achievements motivates the student to reflect on the diversity of approaches, as well as to expand knowledge about the features of the use of professional terminology, the origin of terms in the Russian language. The materials of the manual can be used selectively, according to the needs of a particular audience.

The work with the manual, which represents a text-centric approach, is aimed at the development of skills of professional communication and the creation of texts in English through a system of lexical, phonetic, receptive, reproductive and productive communicative exercises to texts of a professionally-oriented character.

The manual includes exercises that involve work on the extension of vocabulary; improvement of pronunciation skills; improvement of skills of introductory, search and analytical reading; development of skills of different types of speaking, writing, etc.

5.2. The specificity of the development of the online grammar textbook in the digital age: the hybridization of teaching

Hybridization of teaching linguistic disciplines is due not only to the changed goals of education associated with the need to navigate both in the real and digital professional linguistic area, but also the fact that the traditional language course is usually limited to a small number of hours and is often insufficient for mustering a large amount of new material.

When developing an online textbook for the study of linguistic disciplines, it was intended to use both methods of synchronous learning and asynchronous associated with the use of an interactive electronic grammar textbook see e.g. (Alexandrova & Egorova, 2018). The manual reflects the main topics of grammar; lexical material takes into account the interdisciplinary focus of the specialty. The basic rules of grammar are set out in the manual in the form of tables; the tests allow students to check the quality of mastering the theoretical material. Submission of grammatical material is assumed following the emerging needs of students who, as a rule, have a different level of language training.

6. Findings

We have conducted a survey about the course among students and teachers involved in the testing of new traditional interdisciplinary textbook aimed at improving the knowledge of the English language in the professional area, and electronic online grammar textbook aimed at improving grammar skills.

6.1. The approbation of the interdisciplinary textbook

After testing the textbook in groups of 2nd-year students (“Economic security” faculty) a survey attended by 28 students was conducted. The participants were asked to answer several questions on a scale of 1 to 7. Answering the question “Please rate the work with the textbook as a whole” all participants gave the ratings in the range from “5” to “7”. Moreover, 43% of respondents put the maximum score. To the questions “How much new linguistic information have you got?” and “How useful was the material in terms of content?” all the participants gave the ratings in the range from “5” to “7”, more than 64% of respondents gave the maximum score. Answering the question “How useful will the acquired knowledge be in further work, study?” 100% of the participants suggested that the knowledge gained in the course will be useful for further study and work. When answering the question “How difficult was the material?” 79% of respondents reported that the material was of medium difficulty, noting that the appropriate level of material contributed to comfortable work and assimilation. Thus, the total number of positive responses was 100%. Teachers noted an increase in motivation and interest in the subject, improving performance discipline, which affected the overall performance of students.

Thus, the development of methods of teaching foreign language for professional communication purposes for specialties with an interdisciplinary focus requires revision of not only the content of the lexical sections of textbooks but also the types of provided tasks.

In general, the use of relevant topics, vocabulary, and grammatical exercises helps to strengthen interdisciplinary connections between the teaching of linguistic disciplines and disciplines of the professional cycle.

6.2. The hybridization of teaching: the use of online grammar textbook

When testing of the online grammar textbook in groups where it was used for one semester, after the survey in the vast majority of cases the users noted only positive aspects, such as ease of the using, since the textbook is always with you on telephone, immediate check of the results of the implemented

tasks (self-test tasks), the possibility to work at an individual pace, because the students of non-linguistic departments usually have different level of grammar skills, etc.

The teachers also noted positive practical results. It was found that the use of an electronic online textbook helps to save time on the checking of tasks which is performed automatically, and pay more attention to the organization of the educational process. At the end of the session, there was a significant increase in performance in groups where digital tools were used. The electronic educational tools allow the teachers to choose the best approach to the so-called “digital generation”, to find common ground with its representatives. The teachers also noted that the hybridization of educational tools helps to develop creative thinking which “is a skill required for the positions which involve ideation and creative solutions for challenging problems. These jobs could not be replaced by robots even in the Era of Automation and artificial intelligence when many tasks are automated” (Alexandrova, 2019b, p. 79).

Thus, hybrid training, associated with the use of an interactive online textbook to consolidate and systematize grammatical skills in the course of foreign language of professional communication, is appropriate and justified, because it can significantly save time allocated for classroom training, and contributes to the formation of information technology competence.

7. Conclusion

New goals and content of training, as well as the popularity of new specialties with an interdisciplinary focus, change the social order, and together with this the requirements for educational programs. An adequate answer to this challenge is the creation of a hybrid course that takes into account: 1) the interdisciplinary character of specialties and a variety of approaches to professional issues in the world community; 2) digital business and educational reality. Taking into account these requirements becomes a guarantee of the high quality of education, which is an important factor in professional growth and competitive advantage. The study of relevant topics directly related to future professional activities helps to improve the results of the students because it enhances their motivation. Moving the grammatical material beyond the classroom work in the digital space is appropriate because it helps teachers to save time for speaking tasks, and let students work at an individual pace. The integration of traditional and multimedia technologies, as well as the creation of autonomous didactic units in the lexical and grammatical sections, allow teachers and students to use them following the level of students and the needs of a particular audience, contributing to the individualization and democratization of educational process.

References

- Alexandrova, E. M. (2019a). “Kvaziperevod” kalambura: spetsifika ispol'zovaniya algoritmov [“Quasi-Translation” of the Pun: The Specificity of Using Algorithms]. *Tomsk State University Journal*, 445, 5-11. <https://dx.doi.org/10.17223/15617793/445/1>
- Alexandrova, E. M. (2019b). Play on words translation and creative thinking: designing a university course. *European Proceedings of Social and Behavioural Sciences, EEIA 2019 International Conference "Education Environment for the Information Age", LXIX*, 78-85. <https://doi.org/10.15405/epsbs.2019.09.02.10>.
- Alexandrova, E. M., & Egorova, Ju. A. (2018). *Basic English grammar with exercises: uchebno-metodicheskoe posobie, jelektronnoe izdanie setevogo rasprostraneniya*. M.: KDU, Dobrosvet.

- Alexandrova, E. M., Gavrish, A. S., & Muravykh O. A. (2019c). *Professional English in Use: economic security: a training manual*. In E.M. Alexandrova (Ed.). M.: RG-Press.
- Bassy, A.-M., & Séré, A. (2010). *Le manuel scolaire a l'heure du numerique. Une «nouvelle donné» de la politique des ressources pour l'enseignement. Rapport n° 2010-087*. Retrieved from <http://www.education.gouv.fr/cid/54786/le-manuel-scolaire-a-l-heure-du-numerique.html>
- Beaupré, S., Collin, Ch., Drapeau, B., Kawun, E., Landry, N. (...) Tremblay, J.-F. (2013). *Guide de conception et d'utilisation du manuel numerique universitaire*. Presses de l'Université du Québec. Retrieved from <https://www.puq.ca/catalogue/livres/guide-conception-utilisation-manuel-numerique-universitaire-2664.html>
- Begeneva, E. I. (2010). Smeshannaja model' obuchenija v prepodavanii jazyka (na primere interaktivnogo kursa RKI «Russkaja gazeta k utrennemu kofe») [Mixed model "teaching in language teaching (for example, interactive course of the RCT" Russian newspaper)]. *Nauchnyj vestnik Voronezhskogo gosudarstvennogo arhitekturno-stroitel'nogo universiteta. Ser. Sovremennye lingvisticheskie i metodiko-didakticheskie issledovanija*, 2(14), 137-145.
- Berenguer, L. E. (2015). Le manuel numérique: un nouveau défi pour le professeur de FLE. *Synergies Argentine*, 3. Retrieved from <https://gerflint.fr/Base/Argentine3/berenguer.pdf>
- Capelli, G. (2003). E-Learning in the Postsecondary Education-Market: A View from Wall Street. In M.S. Pittinsky (Ed.) *The Wired Tower. Perspectives on the Impact of the Internet on Higher Education*, (pp. 41-63). Pearson Education - Prentice Hall, Upper Saddle River, NJ.
- Chepyzhov, V. V., Aleksandrova, E. M., & Timokhov, O. N. (2018). Kak sozdat' onlajn uchebnik dlya universiteta [How to create an online tutorial for the university]. In G.G. Molchanova (Ed.), *Yazyk. Kultura. Perevod. Kommunikatsiya: sbornik nauchnykh trudov*, 2, (pp. 148-152). M.: KDU, Universitetskaya kniga. [In Rus.].
- Dudenev, G., Hockly, N., & Pegrum, M. (2013). *Digital literacies*. Harlow: Pearson Longman.
- Evdokimova, M. G. (2017). Innovacii v professional'no orientirovannom obuchenii inostrannym jazykam [Innovations in professionally oriented teaching of foreign languages]. In D.N. Novikov (Ed.), *Magic INNO: new dimensions in linguistics and linguodidactics: Sat. scientific works*, 2, (pp. 47-52). Moscow: MGIMO-University. [In Rus.].
- Gerasimova, S. A., & Makarova, I. V. (2017). Ispol'zovanie obuchajushhej platformy iSpring pri prepodavanii inostrannogo jazyka [iSpring learning platform in foreign language teaching]. In D.N. Novikov (Ed.), *Magic INNO: new dimensions in linguistics and linguodidactics: Sat. scientific works*, 2, (pp. 293-300). Moscow: MGIMO-University. [In Rus.].
- Irina, V. Yu. (2017). Intensifikaciya samostoyatel'noj raboty studentov komp'yuternyh special'nostej s pomoshch'yu setevyh tekhnologij veb 2.0 pri obuchenii professional'no orientirovannomu inostrannomu yazyku [Enhancing self-study of IT students through the use of WEB 2.0 network technologies in LSP]. In D.N. Novikov (Ed.), *Magic INNO: new dimensions in linguistics and linguodidactics: Sat. scientific works*, 2, (pp. 311-316). Moscow: MGIMO-University. [In Rus.].
- Kashuk, S. M. (2017). Tehnologicheskie innovacii i lingvodidakticheskie konstanty v obuchenii inostrannym jazykam [Technological innovations and linguo-didactic constants in teaching]. In D.N. Novikov (Ed.), *Magic INNO: new dimensions in linguistics and linguodidactics: Sat. scientific works*, 2, (pp. 316-322). Moscow: MGIMO-University. [In Rus.].
- Kopylovskaja, M. Ju. (2017). Kreativnye cifrovye instrumenty v formirovanii ključevyh kompetencij XXI veka [Creative digital instruments in fostering 21st century skills]. In D.N. Novikov (Ed.), *Magic INNO: new dimensions in linguistics and linguodidactics: Sat. scientific works*, 2, (pp. 322-328). Moscow: MGIMO-University. [In Rus.].
- Levine, A. (2003). Higher Education: A Revolution externally, Evolution internally. In M.S. Pittinsky (Ed.) *The Wired Tower. Perspectives on the Impact of the Internet on Higher Education*, (pp. 13-39). Pearson Education: Prentice Hall: Upper Saddle River, NJ.
- O'Reilly, T. (2005). *What Is 2.0. Design Patterns and Business Models for the Next Generation of Software*. O'Reilly Media, Inc. Retrieved from <http://www.oreilly.com/pub/a/web2/archive/what-is-web-20.html>
- Roussel, Ch., Lemieux, M.-M., Landry, N., & Samson, G. (2017). *L'utilisation du manuel numerique en contexte postsecondaire: avantages et inconvenients*. Retrieved from <http://sticf.univ-lemans.fr/num/-vol-2017/-24.3.1.roussel/24.3.1.roussel.htm>
- Thompson, M.M. (1998). Distance Learners in Higher Education. In: C.C. Gibson (Ed.) *Distance Learners in Higher Education: Institutional Responses for Quality Outcomes*, (pp. 10-18). Madison, WI: Atwood Publishing.