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**BLENDED TECHNOLOGY IN FLT WITH THE ELEMENTS OF
LEXICAL APPROACH FOR NON-LINGUISTS**

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Abstract

The article raises the issues of blended learning in foreign language teaching (FLT) of non-linguistic students through combining online lecturing with the traditional approach. The current relevance of the paper consists in considering a foreign language (FL) as highly instrumental in communication among professional community, which is consistent with the challenges of language for specific purposes (LSP), namely, bringing learning content and teaching methods closer to practical learners' needs by developing FL academic communication skills to be applied in the future students' professional activity. The criteria for selecting the subject-matter, i.e., authentic audio/video materials and text resources, have been analyzed in terms of students' future career guidance. The technology of academic writing in FL is rooted in the basics of the lexical approach while integrating such writing techniques as note-taking, paraphrasing, etc. The practical value of the paper would lie in demonstrating that the suggested course enables the development of FL communicative academic competence of non-linguistic students. The course of blended learning integrates components of a traditional lesson with online lecturing as well as analyses of authentic texts, the specially developed system of exercises along with some elements of the lexical approach. It might provide the framework for further development of new technologies of both auditory FL education and autonomous study of FL to be fully equipped for producing academic discourse, reports and research papers.

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Keywords: Academic communicative skills, blended learning, lexical approach, non-linguists, online lecturing.



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1. Introduction

There has been detected an interesting tendency in recent years, i.e., the level of global net penetration has become considerable in North American countries in 2020 with 348, 908,868 Internet users and 94.6% for Dec. 2019. Yet at the same time non-English speaking users are exploring the Net more and more intensively while importing their language and cultural identity into electronic communication. The maximum increase of the Internet users has been recorded in Asian countries according to the statistical data of January 2020. More than 2,305,458,859 people have been registered to be interested in WWW resources, which accounts for 53.7% of the entire Internet users. There have been enrolled 109,552,842 Internet users in Russia in 2019, which constitutes 76.1% penetration of the Russia's population. (www.internetworldstats.com).

The number of Internet users who study foreign languages (FL) through Internet resources has noticeably grown as well.

The revolutionary surge in e-communication studies in different sciences such as sociology, psycholinguistics, cognitive disciplines, applied linguistics, FLT and interdisciplinary integration is entirely justified in this regard. In general, these studies consider the nature of e-communication, its status in global academic community, its interconnections within entire human communication sphere, its genre character, verbal and non-verbal means of information interchange, its grammar and vocabulary (AbuSa'aleek, 2013; Averianova, 2012; Crystal, 2006; Herring, 1996; Macfadyen et al., 2004; Miller, 2003; Sun, 2010; Thurlow, 2006; Warschauer, 1997).

The methodological relevance of Internet resources and e-communication in FLT of non-linguistic students could not be overestimated since the availability of unique authentic language data enables both the process of FLT to be mastered and students to be motivated for further self-awareness and self-discovery. In addition, the advances of science along with innovative methods and technologies of education and widespread digitalization and computerization have given rise to e-learning platforms such as Moodle, iSpring, Teachbase, GetCourse etc. which have become popular with training centres and universities for developing e- and m-learning courses and lessons (Clarà & Barberà, 2013).

2. Problem Statement

The worldwide practices demonstrate the tendency for the traditional ways of organizing educational processes to be modified, which has been stimulated by a variety of factors. Student-oriented approach to education developed by Hoidn (2017), on the one hand, universal informatization, widespread IT and communicative technologies, expansion of social educational networks, professional on-line communities, massive open on-line courses, on-line learning with open-access study aids, on the other hand, - these are the signs of global changes to be needed in the whole educational paradigm with the subsequent adjustment of goals, objectives and principles described fully in works by Clarà & Barberà (2013), Crystal (2006), Herring (1996), Sun (2010) and Warschauer (1997).

Modern society seems to be in great demand for professionals with adaptive flexibility who are able to process vast amounts of information, obtain and update knowledge as well as master professional competences. The traditional system of FLT does not appear to meet these demands to the full extent,

therefore, a fundamental reform of tertiary education is to be launched. According to Tomlinson and Whittaker (2013), the technology of blended learning with its integration of traditional paradigm and distant techniques might provide an alternative to bridge the gap between current social demands and incomplete readiness of technical universities to meet them. This technology could be most appropriate for ESP courses, which are currently most sought after due to their educational potential and communicative relevance (Darwis, 2016; López-Ozieblo, 2018).

The traditional instructive paradigm placed a teacher as an instructor who hands on the torch in accordance with the programme. Nowadays the ideas of constructivism are in the limelight, which may imply that it is students who construct their own cognitive awareness by incorporating new information into previously acquired knowledge (Thurlow, 2006). Taking into account the data of cognitive psychology, i.e., every person goes through cognitive processes in his/her own way and the results of education are different for everyone (Miller, 2003), the relative autonomy of a student and the responsibility for his/her own subject study together with the teacher are to form the basis of education to train competent specialists, professionally mobile, prepared for self-organization, self-discipline and self-reflection as well as life-long self-teaching (Averianova, 2012; Cavage, 2017; Darwis, 2016; Herring, 1996; López-Ozieblo, 2018; Macfadyen et al., 2004; Thurlow, 2006; Warschauer, 1997).

A blended learning technique which appears to be compliant with all the above-mentioned requirements could be put into practice with the proposed alternative module study of a subject via remote technologies within traditional practices.

It appears apparent to the authors that the given mode of education could not prove effective unless the educational process is methodically valid in terms of its purposes, technologies, content and techniques.

With this in mind, the authors have designed an LSP course for non-linguistic students which could contribute to improving the learning process and serve an efficient tool to effectively communicate in their future professional community.

In this context, the problem statement is the relevance of the suggested course for non-linguistic students in terms of the developed methodology, learning goals, teaching audio/video materials and expected outcomes at the Moscow Region State University University.

3. Research Questions

On the basis of the given literature analysis the following three research questions were asked: “What kind of methodology should be developed to integrate scientific guidelines and educational objectives of professional communication?”, “Which FLT methods should be used to help non-linguistic students acquire academic communicative skills for future professional purposes?”, “Which way are the teaching materials to be brought closer to practical needs of students?”

4. Purpose of the Study

Our study was aimed at showing the possibilities of some Internet-technologies for FLT, on the one hand, and, on the other, providing some theoretical and practical evidence that FLT could be an

efficient tool of developing academic e-communicative skills of non-linguistic students. In line with foreign and native educationalists we could maintain that abstract and thesis writing skills are to be integral part of contemporary education and academic communication and a focal point of teaching oral and written speech to non-linguistic students.

The pursuit of the goal implies considering the following issues:

- 1.The overview of special literature related to developing research and professional communicative skills of non-linguistic specialists; the study of FL with the use of Internet resources.
- 2.The analysis of authentic vocabulary and grammar material in the process of teaching oral and written speech skills.
- 3.The description of technology of teaching abstract writing in FL with the elements of lexical approach introduced by Lewis (1997) and integrating techniques of note-taking, paraphrasing, paragraph development, sentence combining, parallel writing etc.

The analysis of the preliminary results of the experiment conducted in some groups of a non-linguistic faculty.

5. Research Methods

In process of examining the subject-matter the authors used the following methods: pre-research survey to make a students' needs analysis; post-research survey of students' progress; literature analysis to collect theoretical data on the problem; a three – stage pedagogical experiment to monitor, test and assess the preliminary results obtained.

6. Findings

It is believed that each academic subject is aimed at providing new culturally significant knowledge. Similarly, student research is aimed at developing researcher's skills as a universal mode of cognition by encouraging self-study and personal activity in an educational process and obtaining new subjective worldview.

6.1. University research as a preparative stage for future professional communication

Tertiary professional education is known to develop such general research abilities as analysis and prognostication as well as intellectual and creative potential of students along with professional development. In the course of research processes students acquire research competence for future career growth.

Traditionally scientific research involves several stages which might be replicated in students' activity:

- *Orientation* (isolation of a subject domain in the process of research);
- *Problematizing* (problem awareness and identification of issues to be solved, goal-setting);

- *Research methodology* (method/methodology selection and validation, the choice of a guiding principle in the selection of material for research);
- *Planning* (objective setting in orderly sequence, staging of research procedures);
- *Empeiria* (empirical data collection, setting up and conducting an experiment, initial systematization of the data obtained);
- *Analysis* (generalization, comparison, analysis, data interpretation, summing up);
- *Reflection* (correlation of the expected results with the obtained findings, with previously received scientific data, with research conducting procedures).

Integrating general scientific guidelines and educational objectives of professional communication might lead to the conclusion that FLT for specific purposes, its content and methods are to be brought closer to practical needs of students to acquire scientific communicative skills for future professions (Cavage, 2017; Darwis, 2016; López-Ozieblo, 2018; Paul & Elder, 2008).

Contemporary society is generally known to provide for the vast variety of available educational resources so that students could follow their own path whether to study under teacher's guidance or by themselves or by combining these alternatives. It should also be noted that the self-study of authentic materials has become the central issue of our time because it brings the learner closer to the use of language in real-life environment, introduces varied linguistic units to be practiced autonomously in written and oral communication.

6.2. ESP course of blended learning in non-linguistic universities

The use of distant (remote) learning FL courses in tertiary educational space has brought to life various forms of testing, on-line exams with degree awarding, on-line-seminars and webinars, video-conferences in foreign languages along with electronic manuals and training materials, on-line courses, the most widespread of which appear to be brief video-lectures. The latter explain some grammar material, present and practice vocabulary, study academic article writing, interpret some terms, examine the structuring of professionally relevant information.

This part of the article will describe a course of FL blended learning for non-linguists. The curriculum accounts for 36 hours of auditory work and 20 hours of self-study and provides for integration into traditional studies authentic texts, a series of video-lectures on "How to write an academic article in FL and a system of training exercises for consolidation of grammar and vocabulary".

Lexical approach as a conceptual framework for the course. The conceptual base of the educational technology under consideration is rooted in Minsky's (1975) frame model, some notions of functional grammar along with the extended version of the lexical approach worked out by Lewis (1997) in the 1990s.

In accord with Lewis's theory we could maintain that a phrase may be presented as related formulaic phrases and, therefore, an abstract either structured or unstructured may be considered as a set of these phrases arranged in the text in their functional order. The following sentence may serve as an example –"The aim of our today's presentation was to report on the results of the investigation". The analysis shows that it consists of several variable formulaic phrases ("the aim of our today's presentation", "to report on the results of the investigation") interconnected by grammar items "was",

“today’s” etc. While studying students could remember it as a whole without splitting into elements and, as a result, they could use it whenever they need to formulate the aim of their paper to make their speech sound fluent.

The video-lectures on “Preparing to write an abstract to an academic paper” and “Vocabulary and grammar items of writing an abstract to an academic paper” present methodical recommendations on how to write an academic abstract in foreign language. The lectures are based upon fundamental ideas of the lexical approach to language teaching which argue that each utterance contains a set of collocations/chunks with variable elements and that grammar items are subordinate to lexical ones (grammaticalized lexis).

It could be stated that each academic utterance in every language obeys the same rules of mathematical logic so that a model based on either conference or symposium materials could be designed with well-outlined stages of a presentation/talk. In accordance with the model a stereotyped academic report fits into a rigid framework of formal logic in terms of linguistics as well. Firstly, there exists a speech intention as, for example, in presenting “*Subject of the research*”; Secondly, there are provided several forms of linguistic expression, e.g. “the aim was to|report on|to show|to present the results of the investigation”.

It may be concluded that by building an abstract as a series of logically coherent phrases we could form a cohesive grammatically correct text.

The final aim of the course would be to form an ability to write her/his own text on a professionally relevant subject.

Techniques of teaching thesis writing, abstracts in FL and exercise samples. The course comprises several modules:

1) The basics of the course is the system of exercises built on the methodical principle of “from simple to more complex”, i.e. “answer questions after listening to the video-lecture (which tenses are used in the abstract, Passive Voice and its limits, synonyms/antonyms of the lexical items); “make 3 thesis statements to the lecture on “Nanotechnology”; “challenge the thesis of the texts and give your arguments in 2-3 sentences etc.

Creative tasks might be as follows: “*title the slide of the presentation*”; “*formulate the hypothesis of the text*”; “*describe the form of the diagram, table*”; “*identify the form of an experiment setup, an equation, the numeric result, formula*” etc.; “*think of a subject of your paper and present it as a thesis plan, as a structured/unstructured abstract*” etc.

In order to carry out these tasks students will need such skills as note-taking, paragraph development, paraphrasing, sentence combining, parallel writing.

2) The course involves the study of grammar items with the use of authentic materials (Cavage, 2017). In addition, each lecture is accompanied by a block of exercises on basic grammar items of primary importance for writing an academic text. The experience of teaching in tertiary institutions shows that the following grammar phenomena would appear relevant for oral and written communication in foreign languages: simple sentence construction;- Active and Passive Voice forms; the key tenses: Present Simple, Past Simple, Present Perfect, Past Perfect; irregular verbs; the general use of articles; the rules of

organizing an utterance (paraphrasing, paragraph development, sentence combining, parallel writing; structuring what is read and listened to (note-taking).

3) A glossary of specially selected lexical units including general and special academic terminology, sets of useful expressions grouped according to functional stylistic principles, i.e., with accounting scientifically valid requirements such as speech register determined by extralinguistic factors (namely, communication within academic community).

Firstly, the expressions are split into the following groups developed in the textbook by McCarthy and O'Dell (2017): general nouns referring to ideas; specific nouns connected with ideas, concepts, processes, activities; nouns referring to ways of thinking, considering; noun phrases; verbs for structuring academic assignments; frequent adjectives and typical combinations with nouns; adverbs that relate to numbers or time etc.

Secondly, special lexical units in use in science literature, i.e., terminology related to scientific notions and phenomena; groups of words used in applied sciences and technologies: “carrier, wafer-plate, substrate”; “slug, hob, barrel, microphone bushing”; “piece, probe, sample vs assay, cast, jig, scantling”.

4) The course provides for compiling glossaries of general and special lexical units. Students take down useful expressions after listening to a lecture or reading a text and compile their own glossaries. At the end of the course these glossaries show different lexical input which might evidence the split-levels of the students along with their willingness for self-study and self-growth and their high motivation.

Gradually, autonomously or under teacher's guidance students succeed in writing academic abstracts and theses.

Regrettably, however, it should be noted that not all groups made the same progress. While some succeed more (49% and 47% of all students respectively), the others, namely, 4%, demonstrated no progress at all. Generally, the positive numbers might give a proof of the effectiveness of the technology and the following results of the experiment are to confirm it.

6.3. Pedagogical experiment and its preliminary results

The authors' technology of integration traditional methods with on-line lecturing as an interactive component was tested in the natural environment, that is, the scheduled classes with the 3-d year students of Physics faculty at Moscow Region State University (MGOU) and National Research Nuclear University (MEPhI). The training situations did not go beyond the routine practices of the educational process and in this respect bore a natural character.

The experiment was conducted in three stages (in 2019-2020 within the course of the discipline “Foreign language for professional purposes”).

The first stage involved monitoring of the learners during studying, current and intermediate control. It also included finding of the most efficient forms of teaching and control.

At the end of this stage of the experiment (diagnostic) we could come to the conclusion that although the extensive experience was accumulated as far as the subject “Foreign language for professional purposes” is concerned in terms of organizing studies and control, the experiment required more advanced system of control during the intermediate assessment be established in regard to building up communication skills. The first stage of the experiment resulted in the theory validation.

The second stage (formative) of the pedagogical experiment was characterized by the examination of the issue concerning monitoring students' professional competence level. It was completed by the development of a situational task under time pressure for the intermediate assessment to test the formation of professional competence in foreign language communication.

The third stage (evaluative) was targeted at the elaboration of criteria for the assessment of students' skills, the preparation of methodical documents and material resources for the intermediate control along with the practical implementation of the improved methodology of the intermediate control.

The assignments aimed at monitoring the practical skills of the three groups of students who studied within the technology under consideration revealed that the students are capable of completing the practical assignments without additional preparation, which allowed testing practical learners' skills during the scheduled time (36 hours per group).

Furthermore, the results of the survey demonstrated that the students were interested and highly motivated in studying the course as oral and written communication would be an indispensable part of their future profession, i.e., working with an authentic paper related to their specialty, correspondence with editors, writing an academic text in a foreign language.

The results of the conducted experiment demonstrated that the students were prepared to fulfil tasks in accordance with the suggested technology; the technology of conducting tutorials proved to be efficient; the methodical recommendations and training materials for the "Foreign language" discipline were elaborated with respect to the real-life needs and interests of the students. The results of the experimental study in the non-linguistic group seem encouraging and stimulating the further use of the teaching materials. The limited publishing space did not let all the data be covered in the paper. Nevertheless the objective figures could witness the effectiveness of the training material as, on average, 56% of the experimental group made better progress with 75 to 84 in the interim performance review while 33% could get higher grades from 80 to 90 and 11% of the low achievers were able to prepare professional academic presentations in English without external assistance. Moreover, the number of students-participants in the English section of the conference *Modern problems of Physics and Technology* (2019) increased, which may indicate that the students became more involved in mastering English for professional purposes as an instrument in their future professional communication. Some quantitative results are also covered in the paper by Klochkova et al. (2016).

In conclusion it could be stated that the presented course of blended learning integrating elements of a traditional approach with an interactive component of video-lecturing accompanied by assignments and a system of special exercises could provide a framework for new methodologies of the auditory FLT and self-study for non-linguistic students.

7. Conclusion

The research of methodologists, psychologists and linguists has led to the conclusion that the ability for literate and fluent speech could be developed only in case a person stores in the active memory a vast volume of words and phrases. This affects the spontaneity of speech, teaches how to think in a foreign language and also ensures the comprehension of the grammar rules is correct.

The suggested course of blended learning with the elements of the lexical approach focuses on an important issue, i.e., word combinations are to be learnt as they are used in real-life speech. These structures are remembered as ready-made complete pieces of speech, or cliché; when used correctly they can form phrases for writing theses, structured/unstructured abstracts, reports and presentations.

Blended learning within the context of the lexical approach can be characterized by the regular selection of grammar and lexical items from authentic texts.

In addition, the course permits one and the same lexical unit to be used in different contexts, exercises at every level of studying FL. Furthermore, this course of teaching productive modes of speech, writing and speaking, is grounded on the principle of incessant interactive communication between participants of the educational process, between teachers and students, students among themselves.

The advantages of the method might consist in nonterminability, constant revision of grammar and lexical material, constant recurrence of one and the same formulaic phrases though in different situations; motivation for a phrase analysis and search for various authentic video/audio sources.

While working on the course the authors relied on the classical positions of the methodology of FLT, namely, the correct setting of objectives, the choice of techniques congruent to the objectives and interest of both a teacher and a student in the final results of studying.

References

- AbuSa'aleek, A. O. (2013). Linguistic Dimensions of Initialisms used in Electronic Communication. *Studies in Literature and Language*, 6(3), 7-13.
- Averianova, I. (2012). The language of electronic communication and its implications for TEFL. *Procedia-Social and Behavioral Sciences*, 34, 14-19. <https://doi.org/10.1016/j.sbspro.2012.02.004>
- Cavage, C. (2017). *University Success Oral Communication, Transition Level with MyEnglishLab*. Pearson Education.
- Clarà, M., & Barberà, E. (2013). Learning online: massive open online courses (MOOCs), connectivism, and cultural psychology. *Distance Education*, 34(1), 129-136. <https://doi.org/10.1080/01587919.2013.770428>
- Crystal, D. (2006). *Language and the Internet* (2nd ed.). Cambridge University. <http://doi.org/10.1017/CBO9780511487002>
- Darwis, R. (2016). Students' perception towards the use of podcast in learning English: A case study of the second grade students at one high school in Bandung. *Journal of English and Education*, 4(2), 80-100.
- Herring, S. C. (Ed.). (1996). *Computer-mediated communication: Linguistic, social and cross-cultural perspectives*. John Benjamins. <http://doi.org/10.1075/pbns.39>
- Hoidn, S. (2017). *Student-Centered Learning Environments in Higher Education Classrooms*. Palgrave Macmillan.
- Klochkova, O., Komochkina, E., & Mustafina, A. (2016). "Triad" strategy as an effective way of developing professional communication skills of physics and mathematics students. *International Conference on Communication in Multicultural Society, CMSC 2015. Procedia - Social and Behavioral Sciences*, 236, 271 – 276. <https://doi.org/10.1016/j.sbspro.2016.12.028>
- Lewis, M. (1997). *Implementing the lexical approach: Putting theory into practice*. Language Teaching Publications.
- López-Oziblo, R. (2018). Independent ESP Learners: The Case for Blended Learning. *Integrating Information and Communication Technologies in English for Specific Purposes. English Language Education*, 10, 37-53. https://doi.org/10.1007/978-3-319-68926-5_4
- Macfadyen, L. P., Roche, J., & Doff, S. (2004). *Communicating across cultures in cyberspace* (Vol. 2). Transaction Publishers.

- McCarthy, M., & O'Dell, F. (2017). *English Vocabulary in Use/Upper-Intermediate. Book with Answers and Enhanced eBook: Vocabulary Reference and Practice*. Cambridge University Press.
- Miller, G. A. (2003). The cognitive revolution: A historical perspective. *Trends in Cognitive Sciences*, 7(3), 141–144.
- Minsky, M. (1975). A framework for representing knowledge. In P.H. Winston (ed.), *The Psychology of Computer Vision*. McGraw-Hill. <https://courses.media.mit.edu/2004spring/mas966/Minsky-%201974%20Framework%20for%20knowledge.pdf>
- Modern Problems of Physics and Technology* (2019). MEPhI. <https://www.elibrary.ru/item.asp?id=38583264>
- Paul, R., & Elder, L. (2008). *The Miniature Guide to Critical Thinking Concepts and Tools*. <http://www.criticalthinking.org/pages/defining-critical-thinking/766>
- Sun, H. M. (2010). A study of the features of Internet English from the linguistic perspective. *Studies in Literature and Language*, 1(7), 98-103.
- Thurlow, C. (2006). From statistical panic to moral panic: The metadiscursive construction and popular exaggeration of new media language in the print media. *Journal of Computer Mediated Communication*, 11, 667-701. <http://doi.org/10.1111/j.1083-6101.2006.00031.x>
- Tomlinson, B., & Whittaker, C. (2013). *Blended Learning in English Language Teaching: Course Design and Implementation*. British Council.
- Warschauer, M. (1997). A sociocultural approach to literacy and its significance for CALL. In K. Murphy-Judy & R. Sanders (Eds.), *Nexus: The convergence of research and teaching through new information technologies* (pp. 88-97). University of North Carolina.