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Work with Foreign Scientific Editions as an Effective Factor in Motivating Undergraduates to Improve their Foreign Language Competency

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Abstract

The article is devoted to the problem of increase of the pedagogical universities undergraduates' motivation to develop their foreign language competency. The main reasons necessitating continuous increase of the foreign language competence level have been determined. Utilizing such research methods as the focus group survey, theoretical generalization, comparison and pedagogical experiment, it has been proved that the maximum inclusion of students in foreign language activities with professional scientific information is an effective factor in increasing the professional orientation of the foreign languages learning by the future teachers. This type of work in the process of studying various academic disciplines provides a positive dynamics of the motivation components and readiness of the future teachers to work with scientific foreign-language information. It has been shown that netnographic analysis of the foreign-language scientific publications is also an effective factor in personal and professional development, socio-cultural communication, and the students' mobility in professional and academic environment.

Key words: *internationalization of education, foreign scientific information, netnographic analysis, motivational factors, undergraduates, increase of foreign language competency, future teachers, scientific publications*

Introduction

Within the framework of integration trends implementation and internationalization of education, higher education in European countries and Ukrainian state is now focused on improving foreign language training of future specialists as an integral part of their general professional competence, which is the factor of competitiveness and the key to effectiveness of social and professional communication in the European area.

Special attention to educational language policy, the importance of development of students' foreign communication skills and provision of personality multilingualism are observed in a number of documents of the Council of Europe and the European Union. Fundamental ideas in European experience of training specialists are: promoting the quality of foreign language education (European Commission, 2005); studying and fluency in more than one language (European Commission, 2004); using innovative technologies in language education (Dostovalova et al., 2018); creating self-paced course of study (Brumen et al., 2018); improving language education through international exchange, participation in programs and grants (Council of Europe, 2011); ensuring academic mobility in multicultural environment (European Commission, 2008); formation of handling competences in using linguistic means for efficient implementation of personal and professional intentions (Council of Europe, 2011).

European experience shows that learning a foreign language is not a problem for most of the population. According to research, over the half (54%) of EU citizens speak at least one foreign language, one in four (25%) – two, one in ten (10%) – three. According to the same study, 67% of polyglot respondents rank their social status as "high", that is, they consider themselves wealthy and influential even according to European standards. Thus the awareness of the EU citizens of direct dependence on "foreign competence = success" dramatically increases their motivation to foreign languages studying (Special Eurobarometer 386, 2012).

The survey involved over 25,000 people representing all segments of the EU population (managers of different branches, entrepreneurs, workers, students, pensioners, unemployed, housewives). Their number appeared to be even higher among representatives of "white collar workers". Ability to work with foreign literature and communicate in a foreign language, English in particular, are fundamental nowadays for professional activity of specialists in all branches, including teachers and lecturers.

A number of reasons that encourage scientific and pedagogical workers to constant increase of foreign language competence level are distinguished:

- 1. internationalization (international publications, grants, exchange program);
- 2. necessity for analysis of original foreign scientific texts;
- requirement in writing annotations to dissertations and articles in a foreign language;
- 4. possibility of internship in educational institutions abroad;
- 5. demand for teachers who can teach foreign students;
- 6. requirement of academic community to have knowledge of foreign language at B2-C1 level;
- 7. the English language status as the main means of communication in IT sphere;
- 8. opportunity to be confident when attending international conferences;
- 9. increase in a person's attractiveness who speaks a foreign language.

Ukrainian students are attracted by the European universities' high level of education, especially by the programs and courses which are taught in English. Since Ukraine has chosen a European vector of development, provision of libraries with foreign textbooks and journals, to organization of the translation and adaptation of recognized scientific papers in Europe and education materials to Ukrainian educational area is of great significance. Besides this, Ukrainian scholars have the opportunity to present the results of their research to the European scientific community. However, in Ukraine, as well as in most post-Soviet areas, unwillingness of graduates of higher educational institutions, in particular educators, to communicate in a foreign language and study foreign sources of scientific information is observed.

Students' involvement in foreign language activities dealing with scientific information which is interesting from the perspective of future specialty is hypothesized to be an effective factor of increasing professional orientation of foreign language learning.

Methodology of Research

To confirm the hypothesis, the following research methods are used: assessment of students' foreign language knowledge while applying for a Master's degree course; focus-group survey; theoretical summarizing; comparison; pedagogical experiment.

The goal of the focus-group survey is to study the following aspects: causes of problems met by students which lead to decreased motivation in foreign language learning; understanding the importance of working with foreign scientific information by future teachers for their professional and foreign competence development; motivation of students to make efforts to work with foreign scientific information for self-education and research; determining the ways to optimize the work with foreign scientific information, which would increase the students' motivation.

To obtain objective and reliable results in the focus group survey, 8 focus-groups were formed (2 groups – foreign language teachers, 6 groups – students of pedagogical university). Each group included 10–12 volunteers. Educators with experience of scientific and pedagogical activity over 17 years (n = 24; mean age = 48.3) were randomly selected. When forming the focus-groups of students, the following sample parameters were taken into account: education (Bachelor's or Master's degree), academic performance in a foreign language at school and higher education institution, course of study and specialty. Thus, students' focus groups were formed by the method of paired selection: 2 groups – students of nonlinguistic specialties with Bachelor Degree and different performance level of foreign language (n = 23; mean age = 17.6); 2 groups – those having Master's degree in nonlinguistic specialties with middle and high levels of academic achievement (n = 45; mean age = 21.6). The total number of participants in the focus group study is 92 people.

Research Results and Discussion

Although the exam in foreign language (mainly English) is compulsory when applying for Master's degree course over the past few years, the results are disappointing. Statistical studies of 2015–2019 years indicate that the majority of Master's degree course applicants have satisfactory level of foreign language proficiency.

Academic years	Students' English proficiency level in ECTS grading scale (results of entrance exams to Master's degree course)			
	A (excellent)	B/C (good)	D/E (satisfactory)	F/Fx (unsatisfac- tory)
2015-2016	0.7 %	26.6 %	69.4 %	3.3 %
2016-2017	1.1 %	29.5 %	67.7 %	1.7 %
2017-2018	1.1 %	36.6 %	62.4 %	0.4 %
2018-2019	4.1 %	25.7 %	69.8 %	0.4 %
2015–2019 years average	1.8%	29.5 %	67.3 %	1.4 %

Table 1. Level of the English language proficiency of the Master program entrants(basing on the entrance exams results in 2015–2019 academic years)

Regardless of fact that the percentage of students with unsatisfactory foreign language proficiency has significantly decreased in 4 recent years, two thirds of Master degree course applicants show satisfactory (D/E) level of foreign language competence. Such low level of knowledge in undergraduates encouraged us to study the main causes of this disappointing fact, including the structure of pedagogical students' motivation for foreign language study.

Both Ukrainian and foreign scholars (Busse & Walter, 2013), (Bračun, 2017), (Diamantatou & Hawes, 2016), (Malykhin & Aristova, 2018) indicate critical tendencies in the state of motivation of modern students in foreign language proficiency. The studies presented are supposed to make a significant contribution to the development of the problem being investigated however, they are not sufficient for its systemic solution.

Studying features and highlighting controversial issues of future teachers' motivation in foreign language learning to study a foreign language and the implementation of various types of foreign language activities will fully define the range of appropriate pedagogical innovations the realization of which will contribute to solving the existing contradictions between: 1) understanding by the students of the importance of a foreign language for personal and professional development and low readiness to use its means to achieve important goals of the subject; 2) attempts recently implemented by higher education institutions to improve the quality of foreign language learning at the level of organizational changes and inappropriate attention to personal needs, values, motives, internal dynamics of personal and professional development of students by means of foreign language education; 3) significant potential of foreign scientific information for increasing potential of students' research work and necessity to carry out professionally oriented foreign language information activities in the educational process.

A separate place in the structure of motivation of foreign language learning by future teachers is the work of students with foreign language scientific information. Foreign language scientific information in the practice of mastering a foreign language by future teachers has several interrelated functions, namely: educational (the resource of prompt acquisition of professionally significant knowledge in the specialty), communicative (the subject of discussion in professional environment) and research (the object of study in the format of preparation of theses, scientific publications). The structure of the concept "foreign scientific information" is determined through the following components: sources (printed materials, manuscripts, Internet resources, audio and video recordings, live speeches of professionals in real time, telecommunications); form of existence (oral, written); view (text, graphics, animation). Let us analyze the survey results.

1. The majority of interviewed teachers and students of non-linguistic specialties consider the entrance level of foreign language proficiency at the stage of entering higher education to be an important reason that affects the ability of future teachers to master foreign language professional scientific information. The revealed tendency is that students of Bachelor's degree of non-linguistic specialties do not consider a foreign language to be part of their specialized field and therefore do not deem it appropriate to make efforts and spend time to improve their foreign language proficiency.

2. Both target groups of respondents are unanimous in the opinion that it is especially difficult to analyze original foreign texts that contain the author's style of presentation and vision of the problem in line with traditions that have developed in the corresponding field of knowledge in another country. Due to the lack of professional experience, especially during the first years of study, and undeveloped skills which are important for working with foreign language information, it is difficult for students to give it proper assessment, and therefore scientific foreign language knowledge is mastered partially and is not used for solving professional tasks, nor serves as the basis for creating their own professionally important scientific information.

3. Future teachers of non-linguistic specialties noted that low level of foreign language proficiency and lack of requirements to use foreign language academic and scientific literature is the main barrier in choosing foreign professional scientific sources for processing.

4. The interviewed academic staff raised the issue that it is important to choose scientific information carefully in accordance with the specialty. They also think it appropriate to jointly compile collections of scientific texts in foreign languages. This thesis was also reflected in the responses of undergraduate students of non-linguistic specialties who emphasized that "when reading and translating the text, they often did not understand what was being discussed", "could not explain how it was related to their education", "considered reading scientific texts unnecessary", "such information would become more comprehensible much later" and so on.

5. Respondents of the focus groups of teachers and students (mostly graduate students) agreed that, in connection with the spread of ICT it is expedient to seek and process digital foreign scientific information. However, not all future teachers have the developed skills to search for the necessary foreign language professionally oriented sources on the Internet, to use electronic translators and dictionaries; lack information about international scientometric databases in

which scientific publications are indexed; are not acquainted with professional virtual communities with which you can set up professional communication; they require assistance from others.

6. The opinion of future teachers on the subjective significance of foreign language education has its own specific character. Most students of non-linguistic specialties understand the importance of learning a foreign language. However, the professional component in such a need is fairly minor (communicative and social motives dominate). The growth of orientation towards the expediency of improving the foreign language professional communicative competence depending on the educational degree and academic achievement in the foreign language has been noted: students with a master degree, in contrast to bachelor degree, have a higher level of such orientation; students with better academic achievement are more motivated to perform foreign language activities. A contradiction has been identified: despite the understanding of the importance of foreign language education, students are more likely to speak about enhancing their foreign language professional communicative skills in the future; the majority of future teachers of non-linguistic specialties do not specify the exact actions taken in this direction either in the past, or planned for the near future.

7. Teachers attest to a decrease in the level of readiness of students to make efforts to study a foreign language, work with foreign language scientific information for the purpose of self-education and for research purposes. Respondents of the focus groups of scientific and pedagogical staff noted negative trends that are increasing among students from year to year: a decline in motivation to foreign language education, the loss of interest in the possibilities of personal and professional development by means of foreign language education; predominance of a reproductive approach regarding foreign language activities; avoiding the fulfilling of additional tasks with professionally oriented content, etc.

Future teachers often use excuses "lack of time", "heavy workload with professionally oriented disciplines", and so on. Only a quarter of the interviewed students of non-linguistic specialties, mainly with a high level of academic success in a foreign language (mostly students with a master degree), expressed their consent to consider writing and defending a thesis in a foreign language; one-third of future teachers from different focus groups indicated their willingness to try to prepare a scientific publication working on foreign language sources on the topic of research (including digital ones); only a few students with a master degree are ready to present the results of their own research to the international professional community.

8. Because of self-doubt, inadequate self-esteem and low level of ambition, lack of knowledge of a foreign language, lack of developed skills in foreign language

communication and work with scientific information in some students, regardless of educational degree, there is psychological discomfort which is accompanied by the experience of negative emotions, and associative transition of a temporary failure to the general range of situations related to the study of a foreign language, that is, the motivation for avoiding failures is established.

Consequently, the analysis of research in the focus groups has shown the existence of difficulties, negative tendencies, contradictions that negatively affect the motivation of learning a foreign language, which lead to the fact that future teachers avoid working with sources of foreign scientific information. Realizing the necessity to overcome the unfavorable phenomena that have been revealed, relying on the conclusions drawn in the process of theoretical generalization of the problem under study, it is expedient to introduce special conditions for the formation of the motivation of future teachers to increase their foreign language professional communication competence through work with foreign language scientific texts.

Reading special literature according to the specialty, in particular Scopus and Web of Science indexed research publications where the most up-to-date achievements are introduced, play a leading role in foreign language learning. The most favorable environment for motivation of undergraduate students for this type of activity is teaching such academic subjects as "Methodology and Principles of Scientific Research" in English that suggests skill formation to work with scientific information sources. The discipline includes the topics of general scientific nature ("Methodology as a Science", "History of Science: The Scientific Discoveries of the Past and the Present", "Methods and Techniques of the Scientific Research", "Evaluation of the Scientific Effectiveness"), as well as those that separately highlight the main approaches, principles, stages of conducting scientific research, recommendations for preparation, writing and correct formatting of Master's theses, publication of scientific research results, etc. ("Categorical Apparatus and Structure of the Scientific Research", "Publication of the Research Results", "Mistakes which Must Be Avoided while Carrying on the Scientific Research" etc). Apart from theoretical value, the suggested course has an applied nature, which further motivates students to study the discipline.

Undergraduates were offered the following tasks for practical classes (classroom and individual): Internet search and classification of English-language sources, as well as analysis of English-language scientific articles on the topics of Master's theses, followed by compulsory on-line discussion. Taking into consideration the specific nature of the institution, most Master's theses have pedagogical and methodological orientation, therefore it is necessary to search for useful information in English-language pedagogical editions such as The New Educational Review. The journal has become an important base for mastering skills in specialized information search in the English language. Undergraduates were invited to choose one issue of the journal and carefully analyze the content of articles paying special attention to materials that are related to the topics of Master's theses.

During the semester more than 50 issues were reviewed. Undergraduates mastered skills of working with foreign sources and got useful information as well. Discussion of the articles facilitated motivation in working with foreign language scientific information in the general structure of motivation to the personal and professional development by creating successful learning environment for achieving success while working with foreign language information. Most students consider netnographic analysis of foreign scientific editions to be of great significance, highlighting the large quantity, high quality and relevance of information concerning the topic of their research in particular.

According to the results of the experiment, we came to the conclusion that foreign language is not only a means of obtaining new information but also the way of exchanging information and a cooperative tool which helps with making collective decisions. Such activity promoted the formation of a positive professional "I-conception", the approximate image "I-professional foreign language real" to ideas "I-professional foreign language ideal"; provided personal sense and axiological orientation to foreign language activities by reinforcing subjective confidence in their own ability to work with foreign language scientific information, creating situations for demonstration of personal learning outcomes and achievements in the field of research work in a foreign language.

The use of innovative pedagogical and information and communication technologies (brainstorm, discussions, forums, blogs, etc.) promoted a high working capacity and motivated future teachers to work with foreign language scientific information. The interactive, personal oriented, dialogical and creative nature of such technologies improved teacher-student relationships during work with foreign language scientific information; diversified methods, forms and purpose of foreign language activities; and provided availability of foreign scientific sources.

Motivation was measured quantitatively as the motivational structure components of the work of the future teachers with scientific texts in foreign language (obtained from the questionnaire by V.K. Herbachevskyi) (Raigorodskyi, 2007). The survey results are shown in the chart (according to the average value, n = 63):

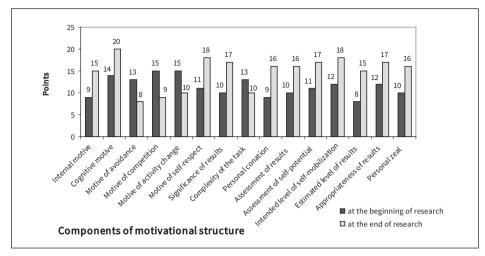


Figure 1. Quantitative interpretation of the motivational structure components (obtained from the questionnaire by V.K. Herbachevskyi)

The results of the research showed a positive dynamic in the development of the motivational structure components following future teachers' work with foreign language scientific information.

In the second administration of the diagnostic, growth of cognitive interest and students' initiative, increase of the internality and personal significance of the implementation of this type of activity was noted. The relation between the self-esteem indicators and ambitions of future teachers at the level of subjective need as well as the ability to process scientific foreign language information have been revealed. Students demonstrated greater willingness to perform more difficult tasks, showed a better readiness to mobilize their own resources and the opportunity to achieve a productive result while working with foreign language scientific sources. Within motivational structure the indicators of manifestation of motives for avoiding failure and competition with other students (future teachers), the desire to stop working with scientific foreign language information, or to replace it with any other activity with the appearance of the slightest difficulties and obstacles, disappeared. Awareness of the necessity for improvement of foreign language professional communicative competence while working with foreign language scientific information increased.

Conclusions

Thus, the analysis presented showed that domestic and foreign scholars focus on problems in how to improve foreign language education, and how to increase the language learning potential of professional communication skills of future teachers, in particular, through the work with foreign scientific information. This requires the introduction of effective changes in professional training of future teachers at the level of organization which is fundamental for the development of productivity of foreign educational institution, as well as further formation of essential personal resources.

The success of achieving positive changes in improvement foreign language professional communicative competence depends on increased motivation of future teachers for research (research in a foreign language) a foreign language.

Formation of future teachers' motivation to work with foreign language scientific information as a fundamental component of foreign language professional communicative competence requires cooperative work of all lecturers to teach students to analyze scientific foreign language publications in their specializations. Such work of students during the study of various professional disciplines will provide a positive dynamic in the state of valuable and motivational orientation and readiness of future teachers to work with scientific foreign language information as a source of personal and professional development, sociocultural communication, and mobility in professional and academic environments.

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