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The theoretical and practical significance of the formation of the search and research competence of a future foreign language teacher using digital technologies

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Abstract

Relevance. The system of teacher training in Kazakhstan has been significantly transformed in recent years. This is caused by the digitalization of the economy and education. The universities were given new tasks to prepare future teachers at schools, including foreign language teachers given the rapid development and diversification of digital technologies in the learning process. The study relevance is predefined by the future teacher and requirement for constant improvement of professional qualities and in-depth knowledge of science and technology.

Purpose. The objective of the study is to analyze the theoretical foundations of the search and research sub-competence formation of foreign language teachers.

Methodology. The research utilized empirical methods via questionnaires among the 2nd and 3rd-year students of the "Foreign Philology" specialty in Kazakh Ablai Khan University of International Relations and World Languages.

Results. The conclusions define the "search and research competence of foreign language teachers" notion; the development of search and research competence in the training of specialists in the sphere of foreign language teaching based on theoretical and experimental research is schematically presented, the step-by-step explanation of each step in the model is given.

Conclusions. The practical significance of this research is in the analysis of possible transformations in the organization and development of search and research skills of students of pedagogical faculties in the specialty of teacher of foreign languages using digital technologies, determination of the importance of sub-competences in the formation of search and research competence, categorization of the process of formation of search and research competence into five important stages, which helps to identify the criteria for assessing the formation of search and research competency and discusses the perspectives of the research.

Keywords: set of skills; teacher; distance learning technologies; professional competence; sub-competence.

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Introduction

The professional competences of foreign language teachers are formed in the form of a set of skills and abilities, the relationship of theory and practice in the walls of the university from the very beginning of training sessions. First-year pedagogic course students learn the importance of their teaching profession from the first days of classes. For future foreign language teachers, it is an introduction to their professional competencies. Based on the cognitive-linguistic-cultural methodology of foreign language education, the main competence of foreign language students is intercultural-communicative [1]. At the same time, A. Paranthaman et al. [2] emphasize that future foreign language teachers, in addition to the core competence, need to form those competencies that produce professional and personal development in teachers. One such competence is search and research competence.

Currently, in Kazakhstan, the transition to the search-and-research approach to education is extremely relevant. It should be noted that modern education is changing drastically, and at the same time, its practical direction prevails. Such trends can be traced both in the Kazakhstani education system and private training courses. For example, experience, skills, and their practical utilization become the priority goals among the expected educational results as an effective means of modernizing education to satisfy social demands [3]. The main defining notion of modernized educational programs is the emphasis on the exploratory and research skills of students. Important elements in those are: instilling student interest in scientific activity; involvement of students in scientific activities; new standards in the quality of research. All the above-mentioned are necessary to implement in the training and, they are directly related to the development and improvement of new technologies. Exploratory and research activities expedite the development of the potential of the future specialist. The learning process includes several skills required in practical activities in future work.

An important aspect in the development of search and research competence in designing a complete education is the educational outcomes, which are manifested in the ability to use the competence in practice. Here it is possible to talk about the list of used know-how in education, which during the study bring the skills of students to automatic performance; types of control and self-control for the development of search and research skills, which are described in the programs of selected disciplines etc. These requirements are for students and are mandatory for students. Thus, the design potential of students' research activity is the most important element of the university's innovation strategy. The organization of students' research work is a permanent labor, attention, and effort on the part of the supporting departments, faculty team, and directors. The branch and direction of research work for graduate students of graduate departments should be included in the programs and be available to students from the first year. It is necessary to develop to the maximum extent possible student research groups, and student scientific communities, and coordinate students under the clear guidance of teachers. The involvement of students in research work is done through the organization and conduct of various types of scientific work (Olympiads,

competitions, and student conferences with the further publication of the results of their research) [4; 5].

From this perspective, the research aims to analyze the theoretical basis for the formation of search and research competencies of future foreign language teachers. The objectives are to define the "search and research competence of foreign language teachers" notion; to present a scheme for teaching search and research skills of future teachers of philology based on theoretical and experimental research; to define a step-by-step explanation of each step in the model.

Literature Review

Search and research skills in graduate students are a priority for the social demand of any organization. Every professional activity involves research activities [4]. Without approbation in any research work, it is impossible to assign or acquire a higher scientific rank [5]. For the quality implementation of research work related to the specifics of the subject, it is necessary to conduct theoretical research based on scientific results, practice, and develop skills [6]. For European scholars, K. Shakhnoza and K. Makhbuba [7] the topic of research activities in the educational process is also extremely relevant. The authors define this competence in terms of the process and technology of teaching students in search and research activities. I. K. Ronen [8] considers the ability to engage in research activities as a relevant competence to be introduced from the first year. Exploration and research activity is knowledge gained as a result of the cognitive activity of the individual in a certain field of science [9]. At the same time, the student must be proficient in research methods and techniques to carry out research activities. From this perspective, R. Modranský and D. Lajčín [10] analyze the goals and achievements of a researcher and his valuable orientations.

Kazakh scientists under the research competence of the future teacher assume a holistic, integral characteristic of the future teacher [11]. These qualities are manifested in his readiness to adhere to the active principles of the researcher in the perspective of his professional activity and himself as a professional to represent the theoretical context of activity in theoretical and functional matters [12]. In this context, it is worth mentioning J. König, D. Jäger-Biela, and N. Glutsch [13] with their positions on increasing competence throughout life and during working life. Search and research competence must be formed from the first years at university and developed in professional life, thereby allowing the future teacher to realize his skills from the first days of work and also allowing the older generation to get the latest developments in science [1]. The future teacher interested in getting the best research results should independently learn and build new knowledge systems and improve their working methods through research work [14].

According to I. DeCoito and T. Richardson [15] it is necessary to develop in the student a proactive, independent attitude to reality from the first days of training. A conscious approach to the formation of research competence is a guarantee of future professionalism and recognition in future professional activity [16]. We agree with the authors, research competences are extremely important for the teacher's skills [17]. Philological

education is a complex process involving cross-cultural communication and entering the cultural space of the language under study [18]. Language acquisition through cross-cultural realities occurs through the study and exploration of the language system [9]. Following the requirements of Kazakhstan's modern education demands, research competence is a priority competence [19]. It shapes students' research skills as one of the new, important areas of professional competence [20]. The professional development of future foreign language teachers is carried out through the mastery of theoretical knowledge, cognitive process, and creative and critical thinking [21]. The teacher can implement borrowed scientific ideas from monographs and articles of other researchers, thus developing students' sub-competencies [22].

Materials and Methods

The search and research competence of the teacher is interpreted as the ability of the teacher to find and use the material base of the information field on the necessary specialty.

The experiment concluded with 30 students (18-20 years). The method of observation and questioning revealed the students' skills, namely:

- the ability to recognize the topic of the research;
- independently find new material;
- think of different ways of communicating knowledge gathered from a variety of scientific fields;
- feel confident in the information field;
- identify elements of research novelty, provide possible solutions to a problem; provide new conceptual ideas;
- develop new educational technologies.

The analysis and synthesis of the critical literature made it possible to define the notion and objectives of search and research competence. The modern foreign language teacher should be professionally oriented in different branches of professional research. The main objectives of search and research activities of a foreign language teacher are to find elements of novelty in the research, to research according to the standards of research culture and follow the algorithms of research activities, justify, experiment, draw conclusions, implement its novelty or new elements in the educational technology or implement new conceptual ideas in the educational system. Analysis of the search-research competence formation of future teachers was carried out in two groups, by experimental method. The experimental work involved students at a language university in the specialty "Foreign Philology", 2nd and 3rd years. The number of respondents was: 22 students in the second year and 16 students in the

third year. The age category was 18-20 years old. To verify the effectiveness of the search and research competencies of future foreign language teachers based on the developed model using digital technology, experimental work was carried out in two forms: the first - mini-group work, and students, the second - a pair of work. The research consisted of five stages which formed evaluation criteria with descriptors:

1. Cognitive-conceptual stage – it was necessary to distribute the selected participants of the experiment into mini-groups and to determine the method of research. To identify the main concepts in the research work, to determine conceptual values:

- interview school personnel, host online meetings with foreign education representatives;
- explore a variety of programs aimed at scientific research via the internet;
- ask the students their opinion on the experimental work;
- study the innovations in the legislation of Kazakhstan and the changes made in the educational program.

2. Information-accumulation stage – discussion between participants of the group, gathering of information and materials. Analysis of materials, identifying problems, comparing, and contrasting, and predicting possible solutions.

3. Pragmatic-representative stage – generalization of the results of the search and research work. Students were offered an analysis of the work. Demonstration of student work with the use of video materials (conducted interviews, video with interviews, the results of the work done with the help of software), Powerpoint as well as diagrams, models, and tables.

4. Analytical and evaluation stage – general analysis of students' research work. Conclusions and reflection of students on the work done as self-control of the research activity, the definition of the perspective of students' research work.

5. Argumentative and communicative stage – discussion of students' research, expressing an opinion, arguments about the usefulness of this type of work, defending the point of view with the arguing facts, voicing the shortcomings of the study, which should be taken into consideration in the future.

Results

The educator must teach students to use specific search methods, including new technologies. Moreover, the student should be able to analyze search results and properly apply the information he or she finds to his or her research. The results of the survey revealed the level of knowledge and practice of students (Table 1).

Table 1. Determination of the level of search and research competence of the future foreign language teacher

Questions	Never	Sometimes	Often	Never, %	Sometimes, %	Often, %
1. To work independently on various information sources	2	15	13	6.66667	50	43.33333
2. Systematically enrich the knowledge of research through self-education and analysis of the real learning process	4	11	15	13.33333	36.66667	50
3. Interpret theoretical knowledge scientifically	5	10	15	16.66667	33.33333	50
4. Broadcast the results of practical activities	9	14	7	30	46.66667	23.33333

5. Scientifically justify, and critically comprehend scientific concepts, theories, and approaches and use them in practical activities	9	15	6	30	50	20
6. Employ modern methods of searching, processing information, and using digital technology and applications in educational and practical activities	10	14	6	33.33333	46.66667	20
7. To formulate current problems on the topic under study, their objectives to find rational ways, forms of solutions	4	16	12	13.33333	53.33333	40
8. Model the content of training material, use, and adapt ready-made research materials, and developments using innovative technologies	4	16	12	13.33333	53.33333	40
9. Independently navigate and restructure the ways of search and research activities in changing conditions (technological and technical approach)	5	17	8	16.66667	56.66667	26.66667
10. Combine different ways of searching and researching when solving a new problem, and create a fundamentally new way of searching for research activity	16	10	4	53.33333	33.33333	13.33333
Average score				22.66667	46	32.66667

Source: compiled by the authors.

Many educators have developed assumptions about teaching and learning and that some may undermine their efforts to promote student learning and independence in their classrooms. It might be necessary for these students (future teachers) to modify these ineffective assumptions. This process of modifying assumptions usually occurs during learning and teaching when their inadequacies

make them visible, prompting the recipient to reflect on their practice, hence the importance of building search and research competence. Important elements in the formation of search and research competence, for future teachers of a foreign language, are stages and sub-competences (Figure 1).

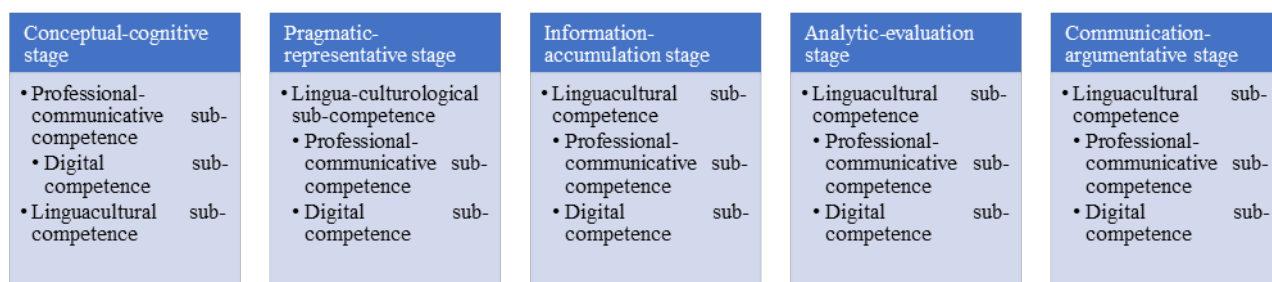


Figure 1. Stages of search and research competence formation

Along with the basic elements of the formation of search and research competence, it is also important to form criteria on which, using new technologies, students have improved their skills in this area. These criteria

helped to establish the level of formation and subjective assessment of students' search and research competence (Table 2).

Table 2. Criteria of search and research competence formation

Criteria	Competence
Linguistic-culturological	Lingua-culturological skills in communication. The ability to analyze selected information, to rethink the collected information from a professional point of view. Ability to correctly select linguistic and context-based terms and concepts. Analysis of the correct selection of linguistic terms in a research paper.
Theoretical-conceptual	To form a research hypothesis, focused work, and research performance.
Professional-pedagogic	Professionally based communication in research activities.
Private-methodological	Using own designs for presentations of search and research activities. Selection of effective research methods, and independent development of algorithms for the use of methods and approaches for search and research work.
Theoretical-conceptual	Subjective self-assessment and evaluation of the search and research work for the future profession. Proof of the importance of students' exploratory research.
Education-digital	Proficiency in digital technology. Discussion and persuasion from a professional point of view Seeking to further develop search and research skills using digital technology.
Information-technological	Arguments for the use of certain digital technologies.

Source: compiled by the authors.

The results of the first mini-group work of the students (3-4 people) showed that all students were fully involved and conducted the search and research work on the educational program, corresponding to the educational-methodical complex course on the subject "Practical course of a foreign language". During the experiment project technology was used: identification of task problems, determining the research method, conducting research, analysis, and presentation of research results and their reasoning. The second experimental work was conducted within the framework of the educational program of 3rd-year students in "Foreign Philology", both on the subject "Methodology of foreign language education" and on the student's independent work with the teacher. In this case, a paired group of 2 students was selected.

Experiment 1. The work related to information search and research was conducted among the selected category of students in the second year at Kazakh Ablai Khan University of International Relations and World Languages, specialty "Foreign Philology – English language". Following the curriculum, the topic was offered "My future profession". The students were offered to expand the topic and to research the "Advantages and disadvantages of the teaching profession". The participants were offered a journalistic environment in their work (i.e., to imagine themselves as journalists). Their assignment was to conduct a study. Students worked in pairs. As such, 22 participants in the research project were divided into subgroups of 3 and 4 students.

The experiment aimed to develop search and research competence by conducting educational and research work based on search work with the use of digital technologies. The students were tasked with conducting journalistic research (in doing so, they could use Internet resources, they could interview or host conversations online), and they had to establish a representative image of a modern teacher and describe the modern education system, and establish the issues that required solutions. To conduct a comparative analysis, the assignment for the students was to have an interview or an online conversation with native speakers (educators). After the students finished their research work, they were surveyed again. The main purpose of the survey was to determine how useful this activity could be in developing students' exploratory and research competence. As a result of the research work and the survey, 12 out of 14 students indicated a high interest in these types of assignments. The following reasons can serve as proof of it:

1. For students, it was a discovery of the nuances of the journalism profession, as, after the interview, they felt the subtleties of this profession;

2. The conversation with representatives of English culture allowed learning new English terms. Moreover, the students enriched their knowledge, language, and communication skills, and practiced qualitatively;

3. Interviews with educators provided an opportunity to increase confidence in the choice of future profession;

4. The work with digital technologies was positively evaluated by all students. All participants felt that the use of new technology saves time and eliminates all issues related to distance. In addition, digital literacy is critical for future teachers;

5. All participants appreciated the course of the interview with representatives of English culture; the informal setting was great practice for the language learner;

6. It is worth noting the informative nature of the work conducted. It allowed us to see the peculiarities of Kazakhstani education and compare it with international education;

7. The experiment has shown that the teaching profession is a combination of useful theory and interesting practice;

8. The participants of the experiment were convinced that the search and research activities help to develop as a researcher and a specialist.

The other two students, after interviewing, were convinced that they were not very competent in research and that they had little understanding of this type of work. After analyzing the students' answers, it can be concluded that they need to expand their understanding of research and increase their interest in professional development.

Experiment 2. The goal of experiment 2 was to prove the potentiality and effectiveness of team building for search and research work in online mode. Organizational peculiarities helped to conduct the experimental study efficiently and effectively. Representatives of the English section of the 3rd year, foreign philology course, (16 students in pairs) took part in the experiment. Then, the experiment participants were asked to conduct an online group search and research study. The topic for the research was determined by the students autonomously. The choice of topic corresponded to the course syllabus and was similar to the research problem.

Research topic: "The global pandemic and online learning in schools. A comparative analysis in the post-pandemic period".

Students were asked to set the goal of the study, define the objectives, establish research methods, analyze the data obtained from a variety of sources, define the problem, show possible solutions to the problem, and draw results and conclusions.

Experiment time constraints: 10 days including weekends.

Time and ways to consult with the teacher: synchronously – 3 times, asynchronously – if necessary or if there are questions during the research.

Date, method, and time for consultation for participants: offline three times, online at the request of the student, when questions or points of concern arise during the research work.

The results of the experiment were based on an online presentation and a short report of the participants on the work done.

Evaluation: participants evaluated themselves and received feedback from the instructor on the evaluation criteria.

The results of the search and research work of the participants.

After completing the research work, the participants were provided with the following materials. 1. The purpose of the study was to objectively assess distance learning in school. The method used – is empirical (interviewing), and theoretical (data analysis). 2. Disclosure of the problem; 3.

Determination of the way to solve the problem; 4. Practical implementation of methods for the problem.

Experiment 2 results. During the world pandemic, all educational institutions switched to distance learning. Since the main research was carried out in primary schools, the level of readiness for online learning of teachers and students in schools in that period was quite low. At the end of the experiment, all participants were interviewed. The discussion was focused on how to establish and conduct the research correctly, prioritizing the abilities and individual characteristics of the students. There were discussed positive, emotional, and problematic issues that the participants encountered during the research work. They explained how they came out of this situation. What kind of problems were present: the technical aspect, the mutual understanding in the team, the research nuances, and the students' general perception of the research in pairs. Their desire for further participation in similar projects was assessed. The results of the participant's responses to the research paper were evaluated as very positive and as such

allowed them to reveal themselves as future professionals. The students who chose to work independently had a positive attitude toward the fact that they were allowed to share their experience, knowledge, and impressions with other students. They also realized that well-organized teamwork and the proper distribution of responsibilities made work easier and saves time.

The results of the study also showed that online learning is not an obstacle to teamwork. Moreover, when completing the planned work and achieving the goal, exploration and research work is always accompanied by positive emotions. Distance communication with fellow students showed that peer participants have the right skills and abilities that teachers did not notice during regular classes. Thus, the participants showed a desire to interact as a team for future research projects. It should be noted that, during the remote and joint search and research work of students, some problems were identified, but students were able to find a way out of the situations (Table 3).

Table 3. Problems during remote and collaborative search and research work

Problems, which occurred among students	Problem description	Independently solved problem
Technical problems	<ol style="list-style-type: none"> 1. Zoom conference had to be postponed due to a bad internet connection. 2. Asynchronous contact, it was necessary to wait for a co-researcher too long. 	<ol style="list-style-type: none"> 1. Meeting was moved to WhatsApp. 2. Communication via phone with a transition to synchronous mode.
Research problems	<ol style="list-style-type: none"> 1. Teachers were not motivated to a cooperative work with students. 2. Checking the reliability of Internet resources is time-consuming. 3. Uncertainty in the choice of specific thematic Internet resources. 4. Students had difficulties during the analysis and interpretation of data. 	<ol style="list-style-type: none"> 1. Students were able to pick the right questions and look for different approaches to educators. 2. Only official sites were used. 3. The data was selected collectively and in a coordinated manner. 4. It was decided to double the number of consultations with teachers.
Problems in the process of working together	<ol style="list-style-type: none"> 1. Problems with time coordination. 2. From a distance, it was difficult to understand what the partner wanted in a particular situation. 	<ol style="list-style-type: none"> 1. Adequate times for partners to meet online were set, and offline or asynchronous consultations were used. 2. Students organized online meetings or phone consultations to solve any occurring issues.

Source: compiled by the authors.

Promoting autonomy in search and research for foreign language learners has become a priority in many curricula in Kazakhstan. However, educators addressing this challenge face numerous obstacles, of which, undoubtedly, one of the most difficult to overcome comes from the educators' perceptions. As the experiment has shown, the actions of some educators and students are driven by outdated assumptions. That is, these assumptions are tied to the traditional model of learning, and they tend to be doomed to failure when used on student autonomy.

Discussion

An in-depth study of individual linguistic elements and facts requires in-depth research. The variety of information bases for improving a foreign language on the Internet is impressive. In this context, A.A. Abdullayev [4] believes that the most accessible and convenient source of information for research is the Internet. Without leaving home, it is possible to get the necessary information on the

issue of interest, but for the study of language and culture, there are various nuances. However, it should be noted that the sources of information on the Internet should be reliable, and the research material should be sourced from official sites. In this perspective, C.A. Seals et al. [23], describes the problems of finding linguistic elements, concepts, and explanations. The authors state that the researcher must differentiate sources and unreliable sources, including printed sources.

Each linguistic symbol, stereotype, and concept carries cultural information about a person. The totality and coherence of these elements give a complete picture of the culture, people, and traditions of the foreign language in general, and its linguistic features. This research also uses a linguacultural approach combined with innovative technology. New, informative horizons are open to foreign language students. A person can learn a language and understand its hidden meanings from the perspective of the studied culture.

Kazakh scholars emphasize the importance of the linguacultural approach [21]. This approach implies the study of language from the perspective of the anthropocentric orientation of modern linguodidactics. For example, F. Valieva et al. [11] describe the main goals of learning through this approach: developing cultural awareness and developing the ability to correctly recognize the diverse manifestations of cultural meanings; developing practical skills, the necessary cross-cultural relationships; the formation of a language personality capable of adequate intercultural interaction. The authors agree that linguacultural awareness should be used to ensure the development of skills and abilities that students should have for cross-cultural communication.

Professional-communicative sub-competence is an important element through which the student develops a worldview of another culture. To perceive the elements of a foreign language culture a person compares elements of his/her own culture, these are his/her basic cognitive stamps, and with the professional-communicative sub-competence, an individual starts using mastered cognitive models and knowledge of a new culture (country of the language being studied), together with the increase of knowledge about a foreign culture in the process of mastering knowledge, reveals new knowledge about his/her culture [16; 24]. Teaching a foreign language for special purposes is concluded without an in-depth and exhaustive study of linguistic details. Therefore, students should develop research skills from the first days of their education. In this perspective, J.A. Carrasco Flores [20] describes such activities as projects, case-study, and essays, which are based on research. According to the authors, these types of work can, starting from the first year, from the student's research skills. Another opinion is that communication, analysis, positive decisions, conclusion, or evaluation in a foreign language improves the abilities of any student and helps communication in the future profession, while also opening new horizons [25]. The student should get used to individualized learning (the concept of autonomy) and independent decision-making from the first year. He or she should set goals to apply his knowledge in practice or open classes, the student's professional interaction is reflected in his professional and communication skills [7].

According to D.N. Gaybullaevna and S.M. Jonpulatovna [26], the concept of student autonomy is ambiguous. Students must internalize the principles associated with this concept, both in theory and in practice, which requires them to work on their ideas about their role as teachers so that these ideas inhabiting them will not sabotage their efforts once they become teachers. From the perspective of this research, this concept is the analysis criterion. Promoting student autonomy implies that the teacher creates a learning environment that expedites autonomous learning. In this context, the student learns language in its linguistic, cultural, and communicative aspects, and learns to explore it from within the language [5; 27; 28]. The student will be able to take responsibility for his/her learning, he/she can determine his/her goals, choose the content, manage the course of learning, choose the methods and techniques to use, evaluate what has been learned (concerning the learning goal) as well as the learning process [17; 29; 30]. This autonomy leads to the

fact that the student takes the learning on himself or herself rather than leaving it to the teacher, whose definition of goals, choice of methods and techniques, and evaluation processes may be incompatible with the student's learning needs. Indeed, in traditional learning situations, it may happen that the student cannot make the connection between the learning activities imposed by the teacher and his (un)acquisitions, which may lead to a loss of motivation [18]. Therefore, the teacher's role should remain traditional, at least at the beginning of learning.

The professional activity of the future teacher also includes the use of research results in the working process. Depending on the type of research, the teacher can display the used and researched materials in one form or another. It can be a study for a practical purpose or materials for the educational process on a particular topic. For example, the study of language phenomena and the field of communication of language units, where video, audio materials, or text materials can serve as a model for the practical application of language units [19; 31; 32]. Digital competence should not be overlooked as a sub-competence in the development of search and research competence. In their research, J. König et al. [13] highlight the importance of digital competences for future professional development, appealing to the fact that the use of new technologies during studies can contribute to the development of students' core competences. The endless use of the resources of the technological educational environment and the ability to properly manipulate information for educational purposes can ensure teachers' success and fruitful work with students [33-35]. Authors believe that this is rather due to the rapid digitalization in all sectors of the economy and, certainly, in education. K.M. Balginova et al. [22] state that technology is the foundation in the current stage of technological development and has a leading role for the foreseeable future. The process of digitalization is now evolving more rapidly than ever. There is a profound convergence of new technologies with material and socio-humanitarian technologies and practices, including educational ones together with the processes of globalization, the process of digitalization is proceeding at an accelerated pace [36-38]. The results of the study show that digitalization helps to master the basics of thinking operations, search and research activities, and helps teachers to focus and qualitatively improve the didactic support for the lesson.

Along with the digitalization of the educational system, some scientists focus their attention on pedagogical innovation, where the pedagogical activity of a teacher is considered in separate phases: research-development-implementation [7; 39; 40]. From the perspective of innovative pedagogy, research activities are carried out according to certain rules, prioritizing self-development, overcoming established values and norms, and professional development of the teacher [15; 41]. Indeed, this concept provides an opportunity to implement a scientific-theoretical and practical approach in the innovative training of teachers. Moreover, innovative pedagogy helps future teachers in creative-investigative activities through the formation of research skills, which forms the fundamental basis of the culture of innovative pedagogy. As such, the search and research activities of future teachers are not only seen as a single-line

professional activity of the teacher but as the implementation of a whole set of professional and pedagogical concepts, following certain research rules, and standards, expanding their horizons of knowledge, enriching the practice of knowledge and skills in professional activities.

Conclusions

Currently, the educational process is undergoing tremendous transformation both in Kazakhstan and around the world. These transformations often require the latest approaches to achieve the goals and objectives in education. Currently, the main task of the education system is to modernize, develop and implement new directions at all levels of education. When creating a good environment for students, there is always the potential for the employment of abilities and skills even remotely, online. This position is the most effective for the development of a methodological model for the formation of search and research competence of students of foreign language education. The research presents a model for the development of search and research skills in future foreign language teachers, considering all the components of the research process. The model as a visualization and interrelation of theoretical and practical parts of research is of particular importance in organizing and systematizing the process of various studies.

As such, this contributes to the analysis of each step of the research. It can be concluded that as a result of the

experiment with students, it was noticed that the tasks addressed the formation of search and research competence with the use of innovative technologies to raise the motivation for the classes and support the improvement of research abilities of students. Even students who were not particularly active during the class did well with the assignments provided. Every experience will potentially provide an opportunity to evaluate a particular situation, process, or outcome. Not in all cases, the experiment done is justified and yields a positive result. Whatever the result, it is an excellent experience and the potential for revision and improvement of skills. Based on the results of the work with the students and their positive feedback on the online teamwork, it can be concluded that the experiment conducted has positive outcomes and results. Further research on the described issues will enable the educational system of Kazakhstan to focus more and more on the development of search and research activities at all educational levels.

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Conflict of Interest

None.

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Теоретичне та практичне значення формування пошуково-дослідницької компетентності майбутнього вчителя іноземної мови засобами цифрових технологій

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Анотація

Актуальність. Система підготовки вчителів у Казахстані за останні роки значно трансформувалася. Це пов'язано з цифровізацією економіки та освіти. Перед університетами були поставлені нові завдання з підготовки майбутніх вчителів для шкіл, у тому числі вчителів іноземних мов, з огляду на стрімкий розвиток і диверсифікацію цифрових технологій у навчальному процесі. Актуальність дослідження зумовлена вимогами до майбутнього вчителя щодо постійного вдосконалення професійних якостей та поглиблених знань у галузі науки і техніки.

Мета. Метою дослідження є аналіз теоретичних засад формування пошуково-дослідницької субкомпетентності вчителів іноземних мов.

Методологія. У дослідженні використано емпіричні методи шляхом анкетування студентів 2-го та 3-го курсів спеціальності "Іноземна філологія" Казахського університету міжнародних відносин та світових мов імені Аблая Хана.

Результати. У висновках визначено поняття "пошуково-дослідницька компетентність учителів іноземних мов"; схематично представлено модель формування пошуково-дослідницької компетентності у підготовці фахівців у галузі викладання іноземних мов на основі теоретичного та експериментального дослідження, подано покрокове пояснення кожного кроку моделі.

Висновки. Практична значущість дослідження полягає в аналізі можливих трансформацій в організації та розвитку пошуково-дослідницьких умінь студентів педагогічних факультетів за спеціальністю вчитель іноземних мов з використанням цифрових технологій, визначенні важливості субкомпетентностей у формуванні пошуково-дослідницької компетентності, класифікації процесу формування пошуково-дослідницької компетентності на п'ять важливих етапів, що допомагає визначити критерії оцінювання сформованості пошуково-дослідницької компетентності та обговорює перспективи дослідження.

Ключові слова: комплекс умінь; викладач; дистанційні технології навчання; професійна компетентність; субкомпетентність.