

Formation of information and cognitive competence of a student's multilingual personality

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Abstract

The constructive approach argues that cultural identity determines ethnicity through the dominance of social, political and economic factors. This approach was formed thanks to the theories of M. Weber, E. Durkheim and K. Marx. The purpose is to conduct a pedagogical study on the formation of information and cognitive competence of a multilingual personality of a student of the Aktobe Regional State University named after K. Zhubanov, 3 courses, pedagogical specialties. The research methodology is the theory of I.V. Leushina. The survey data showed the percentage of students that use various IT services for independent learning of foreign languages (audio podcasts, video podcasts) and various online applications of a general nature (LinguaLeo, Duolingo, etc.). The results revealed a fairly high motivation of students to use IT tools in foreign language classes. Within the framework of the formed educational competencies, recommended by the state standard of higher education of the Republic of Kazakhstan, it is necessary to highlight information and cognitive.

Keywords: foreign language, IT services, information competence, multilingual personality, formation

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1. Introduction

The evolution of society is inextricably linked to the development of education; it is in this area that the social, psychological, general cultural and professional prerequisites for social development are laid. Currently, it is impossible to become a competent specialist without being guided by the spectrum of modern innovative technologies, ideas, schools, directions and approaches implemented in the field of education. We are talking about activity-oriented, personality-oriented, systemic, technological and other approaches that form an information-competent multilingual personality.

The modern stage of development of education is characterised by an increasingly dense introduction of the information competence approach within the framework of the formation of a multilingual personality. As noted by Zeer (2007), the competence-based approach is a priority focus on goals – vectors of education: learning, self-actualisation, self-determination, socialisation and individual development.

Information and cognitive competence in relation to the educational situation of the university is considered as the ability of a person acquired in the process of organised learning to implement communicatively expedient models of foreign language speech behaviour in stereotypical communicative situations.

To date, in the humanities, two opposite approaches to the consideration of language, ethnicity and the social structure of society in the context of globalisation have been formed – constructive and primordial. The constructive approach argues that cultural identity determines ethnicity through the dominance of social, political and economic factors. This approach was formed, thanks to the theories of M. Weber, E. Durkheim and K. Marx. The adherents of the primordialist trend argue that local sociocultural features in the process of globalisation not only have not lost their relevance, but, on the contrary, have become even more pronounced in response to unification.

Teaching a foreign language at a university provides for the consolidation and further improvement of the basic general educational level of language proficiency in combination with in-depth profile language training, focused on using the knowledge gained in the field of future professional activities. The acquisition of information and cognitive competence by students is focused on the formation of such a level of proficiency in a foreign language, which will allow using it to meet professional needs, implement personal and business contacts and further self-education.

The purpose of the study is to conduct a pedagogical study on the formation of information and cognitive competence of a multilingual personality of a student of the Aktobe Regional State University named after K. Zhubanov, three courses, pedagogical specialties.

The research methodology is the theory of I.V. Leushina, who considers the improvement of foreign language training of students from the standpoint of three approaches – cognitive, information synergetic and acmeological. This ensures the effectiveness of modelling the foreign language component of the training of specialists in order to improve it, which is manifested in the expansion of the possibilities of a scientifically grounded choice of technologies, methods, organisational forms and teaching aids.

2. Research results

The theoretical development of the foundations of the competence-based approach by domestic and foreign pedagogical science dates back to the 60s (20th century). The study of the history of the development of this direction based on the materials of psychological and pedagogical literature allows us to trace its evolution. So, Zimnyaya (2003) identified three stages in the development of the theory of the competence-based approach, giving each of them a brief but succinct description based on a deep analysis of the work of scientists (V.I. Baydenko, N.V. Kuzmina, A.K. Markov, J. Ravena, N. Chomsky, R. White, A.V. Khutorskoy and others).

The first stage (1960–1970) is characterised by the introduction of the category 'competence' into the scientific apparatus, the creation of prerequisites for differentiating the concepts of 'competence' and 'competence'. Competence-oriented education was formed in the 1960s in the United States in the general context of the concept of 'competence' proposed by the professor of linguistics at the Massachusetts Institute of Technology Chomsky (1965) in relation to language theory and transformational grammar. Chomsky (1972) showed a fundamental difference between competence as the knowledge of his language by the speaker – listening and the actual use of language in specific situations. White (1959) filled the category of competence with personal components, including motivation. Later, the term 'communicative competence' was introduced, which was first used in 1965 by the American linguist D. Hymes (Grigorieva, 2003). The concept was used as an alternative to the concepts of 'ideal communicant' and 'linguistic competence' proposed by Chomsky (1972).

The second stage (1970–1990) is characterised by the further theoretical development of the categories 'competence' and the introduction of theoretical developments into the practice of teaching (mainly the native language), as well as into the sphere of management and management. Since then, foreign and domestic researchers have identified different competencies and competencies for different types of activities. J. Raven's work '*Competence in Modern Society*' (1984) provides a detailed interpretation of competence as a phenomenon that consists of a large number of components, many of which are relatively independent from each other. According to Raven (2002), some components are more related to the cognitive sphere, other – to the emotional – components can replace each other as components of effective behaviour. The scientist identified 39 competencies in demand in modern society. Noteworthy is the frequent use by Raven (2002) in various types of competence of the categories 'ability' and 'readiness', as well as the fixation of such psychological qualities as 'confidence' and 'responsibility'. Note that the categories 'ability' and 'readiness' organically entered the modern domestic educational process – they made it possible to most accurately formulate general cultural (OC) and professional competences, prescribed in the State Standard of Higher Education of the Republic of Kazakhstan.

The third stage (1990–2001) is the stage of establishing the competence-based approach as a theoretical postulate, characterised by the active use of the categories 'competence' in education (Zimnyaya, 2003). The UNESCO materials provide a range of competencies that are considered to be the desired outcome of education. In 1996, the Council of Europe introduced the concept of 'key competencies' (Implementation of the main directions of informatisation of education and development priorities, 2009), which should contribute to the preservation of a democratic society, meet the new requirements of the labour market and economic transformations. They include information and cognitive competencies related to the information society, as follows:

- possession of information technology, understanding of the possibilities of their application, strength and weakness, the ability to critically approach information and advertising disseminated by the media etc.;
- cognitive competencies associated with the formation of the ability of constant self-education, as the basis for continuous professional training, achieving success in personal and public life (Council of Europe, 1996).

Currently, in Kazakhstan, the information and cognitive competence approach continues to be introduced into the education system. It proceeds from the following position: in the learning process, a person must acquire specific practice-oriented knowledge and develop certain socially and professionally important qualities, thanks to which he can become successful in life (Verbitsky, 2011).

In modern pedagogical science and practice, the definition of 'information and cognitive competence' is widely used. Researchers such as Zaitseva (2002), Raitskaya (2008), Semenov (2000), Sysoev (2004), Trishina (2005) and others understand it as cognition, development of skills and abilities, methods of activity in the field of information technology, aimed at solving professional problems.

Some of the researchers are Zavyalov (2005), Morkovina (2005), Semenov (2006), Temerbekova (2008) and Trishina (2005), among others. For clarity, we will also present the author's views on the structural elements of information competence in the form of a diagram.

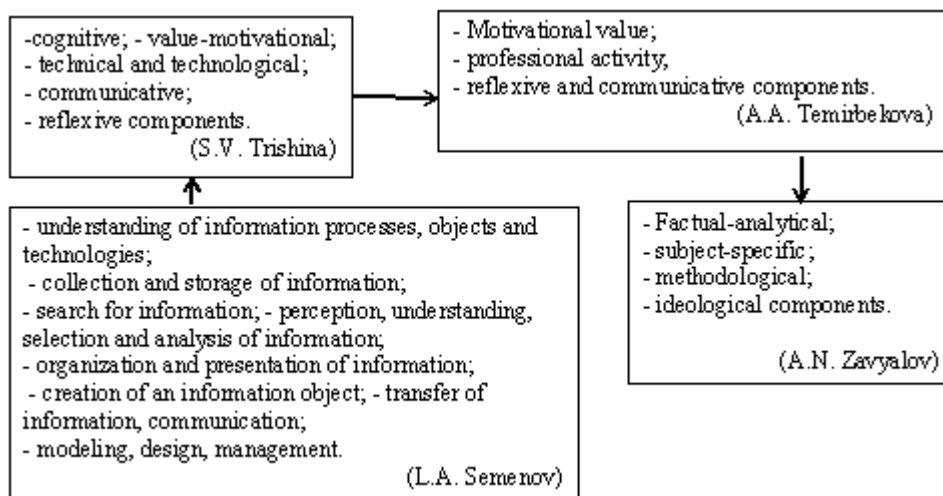


Figure 1. Classification of structural components information and cognitive competence

Figure 1 shows the author's approaches that allow one to see the diversity of the researchers' points of view on the problem of classifying the structural elements of information and cognitive competence. However, there is also a similarity in the positions of researchers, which allows us to talk about existing patterns in determining the main components of this competence.

Information and cognitive activity for the formation of a multilingual personality of a student, characteristic of the disciplines 'Foreign language' and 'Professionally oriented foreign language' has a number of specific features, namely the need to overcome communication barriers and the artificial nature of the conditions of foreign language communication. The strategic goal of studying the disciplines 'Foreign language' and 'Professionally oriented foreign language' at the Aktobe Regional University named after K. Zhubanov is the practical mastering of the necessary volume of information and cognitive competence. This ensures the implementation of a dialogue in a foreign language in the most typical and professional communication situations: conducting a conversation in the specialty, reading special (scientific and pedagogical) and sociopolitical literature, including periodicals, in order to obtain information on their specialty, composing messages, annotations, abstracts, writing private and business letters, abstracts etc.

The process of achieving this goal ensures the practical implementation of the communicative and applied orientation of foreign language teaching, solving general educational and educational tasks, increasing the level of formation of information and communication competence, which allows the student to successfully use a foreign language in all types and forms of speech activity, including for further education and self-education. At the same time, the professional sphere is not dominant, and the sphere of business communication is also represented in the educational process, which helps the development of business vocabulary, forms the skills of conducting business conversations and negotiations. The choice of the sphere of communication is carried out in the context of the subject specificity of the university, a specific situation, the composition of a group of students.

Information resources on the Internet contain, as you know, text, audio and visual material on different topics and in different languages (Table 1) (<https://eng.by/blog/articles/servisy-dlya-izucheniya-anglijskogo>).

Table 1. Information resources of the Internet for learning a foreign language

No.	Service name	Brief content
1	Lingualeo.com	It is an impressive library of texts, video and audio materials. The resource allows you to learn words and compose phrases, read articles, listen to songs and watch videos with lyrics to them, simultaneously translating unfamiliar words, etc.
2	Duolingo.com	Li Lingualeo offers words for learning out of context, that is, word cards with pictures. Duolingo, on the other hand, invites you to learn words immediately in context, in short, simple sentences. Each phrase in the exercises is voiced by a native speaker. In addition, there are tasks to test your pronunciation.
3	Englishtalk.com	The site contains the most common words and phrases that English speakers use in everyday speech. 100 situational dialogues with useful phrases voiced by native speakers, collections of 1,500 essential English words and 1,000 useful phrases in English. Each word and phrase is translated into Russian. Soundtrack for each exercise.
4	Puzzle-english.com	The main training format is listening comprehension training. Phrases voiced by English and American speakers are presented in the form of audio and video puzzles to be collected. In addition, the site has video grammar lessons and assignments to consolidate the skills that have been practiced. Another teaching method is the Teacher method, aimed at users with zero language proficiency. Learning begins with the alphabet, familiarity with pronunciation, sounds and transcription, and then moves on to writing and understanding the language.
5	Livemocha	Language learning is divided into several stages: each includes five lessons, which consists of four compulsory exercises: learning new vocabulary, performing exercises for what has been learned, written and oral assignments. The exercises are taken apart by native speakers. They do this in exchange for someone else checking their exercises later.
6	Busuu.com	Online community for foreign language learners. The site is based on three principles: learn from native speakers, learn from original material, learn for free. Each member of the community is not only a student, but also a teacher who helps those who wish to master their native language.
7	panel.eng.by	It is an online platform for reinforcing the material learned in the classroom through different types of exercises and training in listening, reading and writing skills.

In the 2019–2021 academic year, we conducted a pedagogical experiment on the formation of information and cognitive competence of a multilingual personality of a student of a Kazakhstani university. The reason for this research was the world events proclaimed by the World Health Organisation. Almost all countries of the world have directed their educational policy to distance learning instead of traditional. The referents were 3rd-year students of musical and pedagogical specialties with Russian and Kazakh languages of instruction – 34 students. The study consisted of a questionnaire ‘IT services for independent learning of foreign languages’, diagnostics of the level of formation of the motivational component of students ‘information and cognitive competence, and the project method as a form of determining the quality of the students’ knowledge.

Let’s consider the received diagnostic results. The questionnaire ‘IT services for independent learning of foreign languages’ consisted of the following questions. The first group included questions to identify the degree of interest in IT services. In this regard, the students answered the question – do they use educational services at all or not. The result of this question showed that most of the students receive the necessary cognitive information in special services (67%). Also, the survey data showed that 64% of students use various IT services for independent learning of foreign languages (audio podcasts [58%],

video podcasts [13% of the respondents] and various online applications of a general nature [LinguaLeo, Duolingo, etc.] [29% of respondents]).

The second group of questions was aimed at the qualitative and quantitative use of services for the study of a foreign language (Table 2).

Table 2. Qualitative and quantitative use of services for learning a foreign language

IT Services	Primary perception of basic concepts	Active consciousness, understanding, workshop	Active workshop, bringing to the intermediate language level
Lingualeo.com	23	11	–
Duolingo.com	31	3	–
Englishspeak.com	15	18	1
Puzzle-english.com	19	8	7
Livemocha	7	21	6
Busuu.com	4	20	10
panel.eng.by	21	10	3
Online tutor	5	11	19

Thus, the majority of the recommended IT Services are of an average nature; it is an additional base for consolidating the acquired basic knowledge. The advantage is an online tutor who works personally with a specific student.

To identify the level of formation of the motivational component of the information and cognitive competence of students, we carried out a methodology adapted by Fetiskin, 'Self-assessment of professional and pedagogical motivation' (Popova & Rukavishnikova, 2016). Indicative interest of students' motivational competence in seeing themselves as a multicultural person is determined on average by 74% of the students (Figure 2).

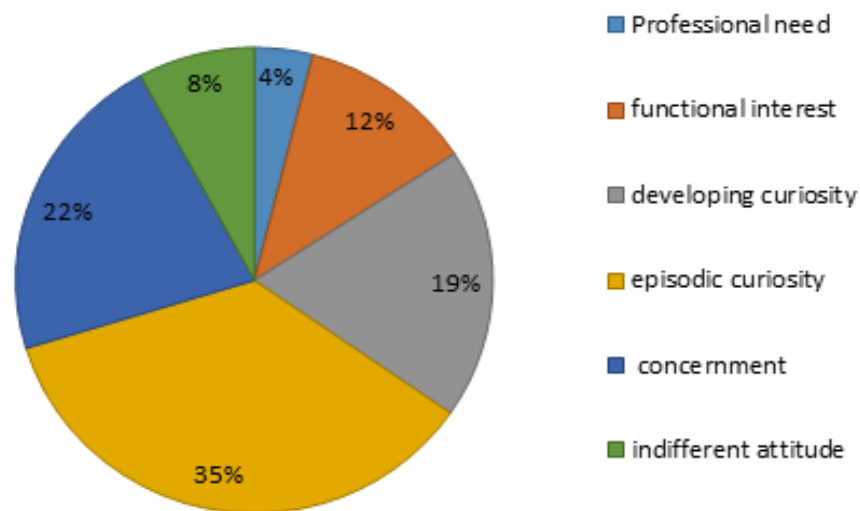


Figure 2. Characteristics of the level of formation of 3rd-year students' motivational competence of the academic programme 6B01401 – Music education for a professionally oriented foreign language

This is due to the specifics of the chosen musical and pedagogical profession, where the choice of the future profession was determined by the early orientation of the student's personality – music. The level of proficiency in a professionally oriented foreign language is an integral part of the chosen specialty. The music profession is creative; it implies active external communications, which is the main reason to become a multilingual person.

Let's consider the process of motivational competence formation of in the context of 1, 2, 3 courses, where the attitude to the professional educational process is essentially different. And this is influenced by factors such as adaptation to a new dominant activity, the establishment of communication in a new society of classmates, the level of preparedness for studying at the university, attitude to the chosen profession, expectations in the image of an 'ideal university' and personal motives and other factors (Figure 3).

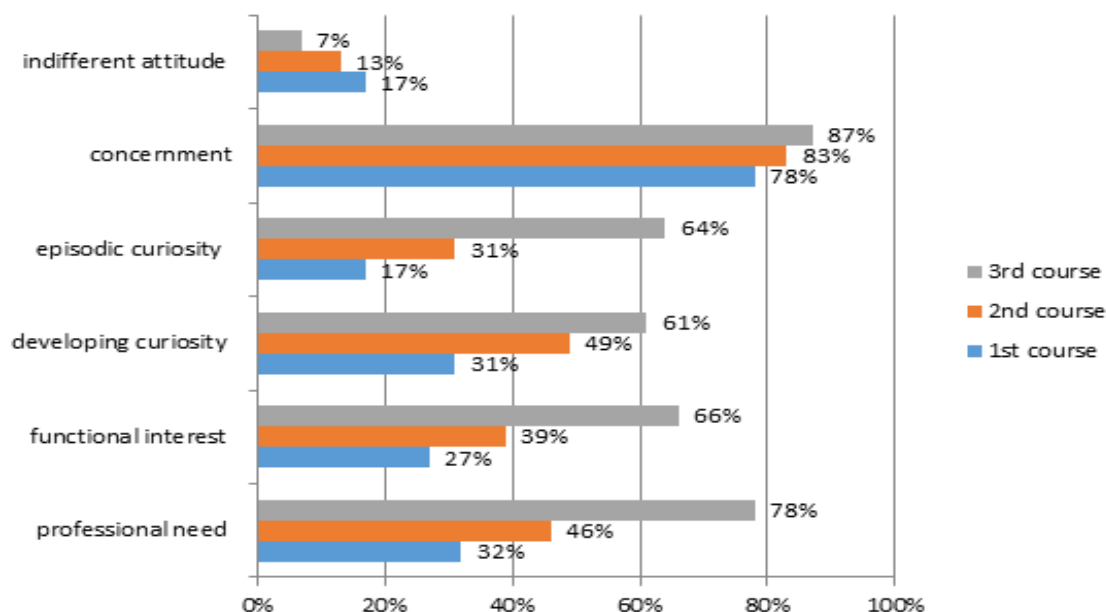


Figure 3. Comparative data of professional and pedagogical motivation students. 1, 2, 3 courses of the specialty 6B01401 – Music education for a professionally oriented foreign language

In general, the comparative data of the professional motivation of students in the formation of information and cognitive competence show a conscious approach to the development of a multilingual personality in oneself.

The quality of the formed knowledge in a professionally oriented foreign language was obtained through educational design technology. The projects were implemented within the framework of distance education and were of a collaborative integrated nature. The advantage was the fact that the group included 1st-, 2nd- and 3rd-year students. This allowed the 1st-year student to see his capabilities in the face of a 3rd-year student and, conversely, a 3rd-year student to determine his potential in a group with students a year or two younger. The projects reflected a musical orientation, but were prepared and defended in English. Let's designate some of the themes of the projects 'From the life of musical instruments', 'Instruments of the Kazakh folk orchestra', 'The magic world of romance', 'Classics of Kazakh music', 'The creative path of Kurmangazy', 'What the musical works of A. Zhubanov say', 'Music of different times and eras (baroque, classicism, romanticism, music of the 20th century)' and others. In general, it should be noted the high activity of students, interest in this type of work.

3. Discussion

A multilingual personality is a complex psycholinguistic structure that combines speech, communicative and vocabulary elements, that is, it is a person who performs speech activity in a foreign language and is a set of different attitudes and values reflected in a foreign language culture of communication.

Having analysed the already existing research methods of information and cognitive competence, we propose the following criteria for the formation of information and cognitive competence of students. The data are presented in Table 3.

Table 3. Criteria for the formation of information and cognitive competence of a student's multilingual personality

Criteria (components of information and cognitive competence of a multilingual person)	Low level	Intermediate level	High level
Motivation	Positive motivation to carry out information and awareness activities	Availability of the system values for the implementation of information and cognitive activities	High level of requirements for the implementation of information and cognitive activities
Information knowledge	Search for the necessary information in accordance with the assigned task	Search, process and transmit the necessary information	Search, processing and transmission of necessary information, analysis
Information skills and abilities	The presence of general skills in working with information, its presentation in the form of an abstract, tables, etc.	Have advanced information management skills; presentation of the received information accompanied by a presentation	Advanced information management skills, knowledge of ICT; the formation of skills in the design and creation of various types of work

The structural components of information and cognitive competence we have considered provoke a discussion about the socio-psychological role of a foreign language in mastering the professional skills of a student's future profession. In this aspect, we are talking about the environmental factor, which is poorly developed both in the university environment and in the vastness of the musical professions. In our opinion, the role of optional special disciplines with teaching in a foreign language should be strengthened, the academic mobility of students and teachers should be strengthened, and the share of internationalisation of higher education should be increased.

4. Conclusion

The results obtained allow us to draw conclusions of the following nature. We have identified a fairly high motivation of students in the formation of information and cognitive competence in practical lessons in a foreign language. However, in our opinion, one should not ignore the fact that not all students, despite the widespread prevalence of a fairly wide number of different IT services (which can be accessed both through personal computers and through a smartphone), use them in everyday life for learning a foreign language.

Theoretical analysis of scientific data allowed us to determine the essence of information and cognitive competence, to systematise the main information sources of teaching a foreign language on

the Internet. The diagnostic analysis made it possible to determine the motivational side of the chosen specialty, its degree of awareness and professional needs. The method of projects made it possible to establish multilingual communication between students of 1, 2, 3 courses with the strengthening of special terminology in an active dictionary.

5. Recommendations

The conducted pedagogical research on the formation of information and cognitive competence of the multilingual personality of students made it possible to develop the following recommendations:

1. Within the framework of the formed educational competencies, recommended by the state standard of higher education of the Republic of Kazakhstan, it is necessary to highlight information and cognitive. The specified competence is relevant for distance learning during the global viral pandemic, it allows developing research skills.
2. The presented list of IT services for the study of a foreign language is of a recommended nature, is incomplete, and if desired, it can be supplemented.
3. Personal data, diagnostics of motivation for the professional orientation of students of musical and pedagogical disciplines, the results of project activities are methodological instructions to increase the quality of vocational training at the university.

References

- Chomsky, N. (1972). *Aspekty teorii sintaksisa [Aspects of syntax theory]* (p. 259). Publishing House of Moscow State University [in Russian].
- Council of Europe. (1996). *Symposium on key competencies for Europe: Doc* (p. 43). DECS.SC.Sec.
- Grigorieva, T. Y. (2003). *Kommunikativnaya kompetentnost' kak osnova kommunikativnogo podkhoda v obuchenii inoyazychnoy kommunikativnoy deyatel'nosti [Communicative competence as the basis of the communicative approach in teaching foreign language communicative activity]*. *Izvestiya Severo-Kavkazskogo gosudarstvennogo tekhnicheskogo universiteta. Seriya «Gumanitarnyye nauki»*. – Proceedings of the North Caucasus State Technical University. Series 'Humanities', vol. 10, pp 80–92 [in Russian].
- Morkovina, E. F. (2005). *Razvitiye informatsionnoy kompetentnosti studentov v obrazovatel'nom prostranstve. Dis. ped. Nauk [Development of student information competence in the educational space. Dis. Cand. ped. Sciences]* (p. 212) [in Russian].
- Popova, E. V., & Rukavishnikova, A. V. (2016). *Izucheniye motivatsii professional'noy deyatel'nosti studentov vtorogo i vypusknogo kursov pedagogicheskogo vuza [Studying the motivation of professional activity among students of the second and final courses of a pedagogical university]*. *Kul'tura i obrazovaniye: ot teorii k praktike – Culture and Education: from Theory to Practice, 1*, 105–111 [in Russian].
- Raitskaya, L. K. (2008). *Informatsionnaya kompetentnost' uchitelya inostrannogo yazyka v vysshey shkole: sushchnost', puti formirovaniya. [Information competence of a foreign language teacher in higher education: Essence, ways of formation]*. In: *Lingvistika i krayevedeniye: metody analiza, tekhnologiya obucheniya. Pyatyy mezhvuzovskiy seminar po lingvokul'turologii: sb. stat'i. V 2 chasa – Linguistic and regional studies: methods of analysis, teaching technology. Fifth interuniversity seminar on linguistic and cultural studies: Sat. articles. At 2 o'clock, Part 1* (pp. 142–152). MGIMO – University [in Russian].
- Raven, J. (2002). *Kompetentnost' v sovremennom obshchestve. Vyyavleniye, razrabotka i vnedreniye [Competence in Modern Society. Identification, development and implementation]* (p. 396). Kogito-Center [in Russian].
- Realizatsiya osnovnykh napravleniy informatizatsii obrazovaniya i prioritetov razvitiya (2009–2010 gg.) (Implementation of the main directions of informatization of education and development priorities [2009–2010]) *Informatizatsiya obrazovaniya i nauki – Informatization of Education and Science, 1*, 3–12 [in Russian].

Sagiyeva, A., Bekenova, D. & Tuleusheva, S. (2021). Formation of information and cognitive competence of a student's multilingual personality. *New Trends and Issues Proceedings on Humanities and Social Sciences*. 8(3), pp 169–178.
<https://doi.org/10.18844/prosoc.v8i3.6409>

- Semenov, A. L. (2000). *Rol' informatsionnykh tekhnologiy v obshchem srednem obrazovanii* [The role of information technology in general secondary education] (p. 12). Publishing House MIPKRO [in Russian].
- Semenov, A. L. (2006). *Informatsionno-kommunikatsionnyye tekhnologii v obshchem obrazovanii: teoriya i praktika* [Information and communication technologies in general education: theory and practice] (p. 326). INT [in Russian].
- Sysoev, P. V. (2004). *Razvitiye informatsionnoy kompetentnosti spetsialistov v oblasti obucheniya inostrannomu yazyku* [Development of information competence of specialists in the field of teaching a Foreign language] [Electronic resource] <http://www.lib.tsu.ru/mminfo/021044960/04/image/04-096.pdf> [in Russian].
- Temerbekova, A. A. (2008). *Informatsionnaya kompetentnost' lichnosti uchitelya kak sotsial'no-pedagogicheskaya problema. Monografiya* [Information competence of the teacher's personality as a socio-pedagogical problem. Monograph] (p. 191). Publishing House of Moscow State University [in Russian].
- Trishina, S. V. (2005). *Informatsionnaya kompetentnost' kak pedagogicheskaya kategoriya* [Information competence as a pedagogical category] [Electronic resource]. Internet Magazine 'Eidos'. <http://www.eidos.ru/journal/2005/0910-11.htm> [in Russian].
- Verbitsky, A. A. (2011). *Lichnostnyy i kompetentnostnyy podkhody v obrazovanii: problemy integratsii* [Personal and competence-based approaches in education: problems of integration] (p. 336). Logos [in Russian].
- White, R. W. (1959). Peresmotr motivatsii: ponyatiye kompetentnosti [Motivation reconsidered: The concept of competence]. *Psikhologicheskii obzor – Psychological review*, 66(5), 297–333.
- Zaitseva, O. B. (2002). *Formirovaniye informatsionnoy kompetentnosti budushchikh uchiteley s pomoshch'yu innovatsionnykh tekhnologiy. Dis. Kandidat ped. Nauka* [Formation of information competence of future teachers by means of innovative technologies. Dis. Cand. ped. Sci.] (p. 169) [in Russian].
- Zavyalov, A. N. (2005). *Formirovaniye informatsionnoy kompetentnosti studentov v oblasti komp'yuternykh tekhnologiy (na primere srednego professional'nogo obrazovaniya). Avtoreferat k.kh.n. Tezis* [Formation of information competence of students in the field of computer technology (on the example of secondary vocational education) (p. 17). Abstract of Ph.D. thesis] [in Russian].
- Zeer, E. F. (2007). Kontseptual'noye i terminologicheskoye obespecheniye kompetentnostnogo podkhoda v professional'nom obrazovanii. [Conceptual and terminological support of the competence-based approach in vocational education]. *Ponyatiynnyy apparat pedagogiki i obrazovaniya: sbornik statey. nauchnyy. tr. Vypusk 5 – Conceptual apparatus of pedagogy and education: Collection of articles. scientific. tr.* (p. 592). VLADOS. [in Russian]
- Zimnyaya, I. A. (2003). Klyuchevyye kompetentsii – novaya paradigma obrazovatel'nykh rezul'tatov. [Key competencies – a new paradigm of educational outcomes]. *Vyssheye obrazovaniye segodnya – Higher education today*, 5, 34–42 [in Russian].