Reusable Data for Teaching and Learning. Springer International Publishing, 2016. P. 153–165. (Translated from English)

11. Maksimenkova O., Podbelskiy V. On practice of using open data in construction of training and assessment tasks for programming courses. *10th International Conference on Computer Science & Education.* 2015. P. 233–236. (Translated from English)

12. Jackson D., Miller R. A new approach to teaching programming, 2009. (Translated from English)

13. Vahrenhold J., Paul W. Developing and validating test items for first-year computer science courses. *Computer Science Education*. 2014, October. Vol. 24. № 4. P. 304–333. (Translated from English)

14. Pendergast M. O. Teaching Introductury Programming to IS Students: Java Problems and Pitfalls. *Journal of Information Techonology Education*. 2006. Vol. 5. P. 491–515. (Translated from English)

15. Leutenegger S., Edgington J. A. A games first approach to teaching introductory programming. *38th SIGCSE Technical Symposium on Computer Science Education. SIGCSE* 2007. New York, 2007. P. 115–118. (Translated from English)

16. de Jonge E., van der Loo M. An introduction to data cleaning with R. Heerlen: Statistics Netherlands, 2013. 53 p.

17. Wichham H. Tidy Data. *Journal of Statistical Software*. 2014. Vol. 59. № 10. (Translated from English)

18. What is R? The R Project for Statistical Computing. 2014. Available at: https://www.r-project.org/about.html. (Translated from English)

19. Stevens S. S. On the Theory of Scales of Measurement. *Science*. 1946. Vol. 103. № 2684. P. 677–680. (Translated from English)

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TO THE QUESTION OF THE USING OF INFORMATION-COMPUTER TECHNOLOGIES IN LEARNING ENGLISH LANGUAGE

Abstract. *The aim* of the article is the using of informational-computer technologies in learning English language of future specialists very effectively, as the didactic function of these technologies is wide. This is due to the fact that

computer technology allows obtaining information multichannel, and therefore increases significantly as the volume of information received, and the quality of its assimilation.

Methods. Modern trends of modernization of educational programs demand introduction of modern methods of teaching. The increasing introduction of new information and computer technologies and application of the competence approach in educational process of Kh. A. Yasawi International Kazakh-Turkish University promotes increase of efficiency of process of English teaching. One of the urgent problems of training of specialists of international level is development of methods of using information technology in forming informational-communicative competence of future specialists.

Results. The relevance of this issue is determined, firstly, by the fact that information and computer technology implies a future specialist of new knowledge, skills, style of thinking which will provide necessary social adaptation to changes and guarantee its competitiveness on the labour market; secondly, necessity of perfection of the methodical-didactic organization of the process of professionally oriented training of future; thirdly, objective requirement of modern society in preparing professionals able to integrate into the world information space; fourthly, tendencies of a national educational policy.

Scientific novelty. One of the main challenges facing the system of training of future specialists is to improve the quality of professional training of students taking into account modern trends of development and use of information technology in professional activities. Worldwide there is a trend of using the computer as an integral means of studying particular scientific disciplines.

Practical significance. Information-communicative competence is considered as a system of internal resources necessary to build an effective communicative action in a range of situations of professional interpersonal and intercultural interaction. Professional communicative act involves the analysis and assessment of the situation, the formation of the purpose and operational structure of the action, the implementation of the plan or its correction, an evaluation of the effectiveness. Hence, informational-communicative competence is the ability to successfully using the English language, to act with it on the basis of practical experience, skill and knowledge in solving professional problems.

Keywords: competent approach of future professionals, professional activity, informational-communicative competence.

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К ВОПРОСУ ОБ ИСПОЛЬЗОВАНИИ ИНФОРМАЦИОННО-КОМПЬЮТЕРНЫХ ТЕХНОЛОГИЙ В ОБУЧЕНИИ АНГЛИЙСКОМУ ЯЗЫКУ

Аннотация. *Цель* статьи – показать возможности использования современных информационно-компьютерных технологий в процессе обучения английскому языку в профессиональных учебных заведениях. Дидактические функции данных технологий весьма широки: они позволяют получать информацию многоканально, что значительно увеличивает объем учебного материала и качество его усвоения будущими специалистами.

Методология. Основой описанного в публикации исследования модернизации образовательных программ на базе внедрения новых информационных компьютерных технологий стал компетентностный подход к организации и осуществлению учебного процесса.

Результаты. Описан опыт разработки инновационных методов и применения информационных технологий при подготовке специалистов международного уровня в Международном казахско-турецком университете им. Х. А. Ясави. Показано, что практико-ориентированное обучение английскому языку с привлечением коммуникационных электронных средств и компьютерных технологий не только преумножает знания и умения студентов, но и развивает у них особый стиль мышления, который поможет им при дальнейшей социально-профессиональной адаптации и гарантирует конкурентоспособность на рынке труда.

Научная новизна. Уточнено содержание информационно-коммуникативной компетенции, которая рассматривается авторами как система внутренних ресурсов, необходимых для построения эффективного профессионального межличностного и межкультурного взаимодействия. Коммуникативный профессиональный акт включает в себя анализ ситуации, формирование цели и операционного состава действия, реализацию плана или его коррекцию, а также оценку продуктивности. Таким образом, информационно-коммуникативная компетенция относительно использования английского языка – это способность успешно решать с его помощью практические профессиональные задачи.

Практическая значимость. Совершенствование методико-дидактического обеспечения образовательного процесса и профессионально-ориентированная языковая подготовка учащихся продиктованы объективной потребностью современного общества в специалистах, способных интегрироваться

в мировое информационное пространство, и обусловлены тенденциями национальной образовательной политики, напрвленной на повышение качества профессиональной подготовки в высшей школе за счет стремительно развивающихся информационных ресурсов.

Ключевые слова: компетентностный подход к подготовке будущих специалистов, профессиональная деятельность, информационно-коммуникативная компетенция.

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Modern global trends in the development of higher education determine the necessity of role and mission to developing new approaches and identify new priorities for the society. It is an objective process caused by the entry of humanity into a new information culture of the XXI century – the century of high technologies, unknown in the civilizational development [1].

In modern conditions of rapid development of science, fast updates of information, it is impossible to learn for a lifetime, it is important to develop interest in the acquisition of knowledge, continuous self-education and self-improvement [2].

The processes of globalization, the rapid development of informational technology and communication systems, as well as the transformation of social and economic nature, due to which the industrial society of production has become a society of science and information, changed the structure of the international labour market and placing new demands on the competence and qualifications of personnel. On the backdrop of these changes, higher education plays an increasingly important role and becomes the key to successful self-realization of man in modern society [3].

Today the industrial sector of the Republic, recovering on the basis of new progressive technologies, is in dire need of new formation specialists with broad expertise and fundamental knowledge for the implementation of the state, business and services.

Kazakhstan has accurately defined a reference point on occurrence in world educational space and carries out modernization of educational system in the context of international requirements. Driving forces of innovation processes taking place at the higher school of Kazakhstan, are adapting to the internal labor market and the desire to enter the global educational system as a full member. We need constant adaptation of educational programmes to the demand of the labour market. The quality criterion is laid readiness for practical activities and a real competitive graduate [4].

At the present time, information technologies have significantly changed all aspects of human existence and, apparently, to the greatest extent, this applies to a substantial increase of productivity of intellectual labor [5]. To date, each competent person of a particular profession must effectively use the potential of information technology in their professional activities.

One of the main challenges facing the system of training of future specialists, is to improve the quality of professional training of students taking into account modern trends of development and use of information technology in professional activities. Worldwide there is a trend of using the computer as an integral means of studying particular scientific disciplines.

Socio-political structure of the world closely connected with information-computer technology and global computer – organization communication, require new approaches to extraction and processing of vast amounts of knowledge, and to education as a vehicle for the transmission of this knowledge [6].

Modern trends of modernization of educational programs require the introduction of active learning methods. It is to such methods include the use of Internet sources.

The relevance of this issue is determined, first, that the informational – communicative competence implies the existence of future specialists of power industry of new knowledge, skills, style of thinking which will provide necessary social adaptation to changes and guarantee its competitiveness on the labour market; secondly, necessity of perfection of the methodical-didactic organization of the process of professionally oriented training of future specialists; thirdly, objective requirement of modern society in preparing professionals able to integrate into the world information space; fourthly, tendencies of a national educational policy [7].

Scientists say that a human knowledge becoming processed them with educational information, adding to the cash mental experience. The body of knowledge about ways and means of gathering, processing and transmission of information to obtain new information about the studied object, with use of the software and hardware is information technology [8]. Information technology, providing access to information through the Internet, contribute to the organization of independent work of students. The using of online resources (educational software with the use of graphics, multimedia technologies, etc.) provides the student with new opportunities for self-learning, helping to develop visual thinking and allows you to obtain information at a higher level of understanding.

The use of informational technology occupies a large place in teaching not only mathematical, natural-scientific and socio-humanitarian disciplines [9]. However, as noted by modern researchers in the field of distance and mi-

xed training, their use usually occurs without reliance on didactic concepts, is often fragmentary and inconsistent, often reduced only to the transfer of educational information. It should be noted that the understanding by the student of the universal methods of solving problems, mastering skills to apply knowledge in a new situation depends to a greater extent, the nature of his mental activity, activity, performance feedback, professional orientation of the learning process, and less on how the material carrier of information, student.

Currently the subject of a competence approach in the higher education system becomes a very important and actively debated. This is due to the fact that it includes a new educational paradigm, the vector of which is directed in the direction of humanization.

Competence-based approach involves helping the student specific competencies. The generally accepted definition of competence in modern science does not exist, however, almost all researchers emphasize that "competence" is a complex concept that includes knowledge, abilities, and skills, but not identical to the simple sum of the latter [10].

In terms of reforming education, the course taken in applying the competence-based approach because it actually strengthens the practical orientation of education, its pragmatic, subject-professional aspect [11]. Not excluding well-known in pedagogy approaches – personal, activity, but combining elements of both, the competence approach has a humanistic, pragmatic and practical orientation that allows to speak about its interdisciplinary and system. Consistency is realized by integrating all components of the educational process in a holistic and dynamic pedagogical system.

The society caused by the development of new information technologies, has led to the need for change of the education system. The primary task of the teaching methods is to achieve a new modern quality of education that outlined in recent government documents as an orientation to the students have mastered the amount of knowledge, but also on the development of his personality, his cognitive abilities and sedately [12].

Successful learning is only possible if the teacher fails to arouse the interest to the subject and systematically support it. In this connection there is the task of a comprehensive and careful study of ways of obtaining information [13].

As currently active is the transition to the information society, Informatization of education is considered as a necessary condition for the development of the personality at the present stage [14].

It is important that in the classroom English language learners felt the beauty of a foreign language. This may be achieved by the use of different ac-

tive forms and methods of work. Note that difficult at first glance, tasks attracted students with its novelty, uniqueness, originality. In the process of education and upbringing of the modern generation one of the main aspects in addition to emotional development is the increase of the intellectual potential of students. Currently, English classes students are given a very large amount of information, influencing the process of training. The researchers raise the question: to use or not to use a computer in lessons? Clearly, the computer reveals to student and teacher to see new opportunities, find new ideas and solve complex problems [15].

The use of information computer technologies in learning English very effectively, as the didactic function of these technologies is wide. This is due to the fact that computer technology allows obtaining information multichannel, and therefore increases significantly as the volume of information received, and the quality of its assimilation [16].

The introduction of information and computer technology in the educational environment of English language lesson allows you to enhance and to stimulate the interest of students, activate their thinking, the effectiveness of learning, individualize instruction, increase speed of presentation and assimilation of information and rapid adjustments knowledge if necessary [17].

The use of computer in learning English language for different purposes:

- when explaining new material to the maximum solubility;
- for optimum consolidation of the material studied;
- to improve the monitoring of students ' knowledge;
- to organize an interesting and fruitful work on the subject.

These lessons can be completely tailored to the use of the computer is in the office at various stages of English lessons.

For the teacher is one of the successful forms of the lesson, as it gives the opportunity to interest the students, to intrigue, to make people think, to attract their attention to the most important information [18].

At the same time it should be noted and disadvantages, which include:

1) the need for special additional hardware to work with the manual;

2) unfamiliarity, non-traditional electronic forms of information presentation;

3) fatigue when working with the monitor;

4) get in some cases the necessary training for the teacher in the field of Informatization;

5) traditional approaches to learning hard way for the modern pedagogical innovations.

Despite the fact that it is technically possible to create electronic textbooks, and teaching materials (educational methodical complex) are fully represented in digital form, the use of information technology in the teaching of

English has some limitations. According to scientists, teachers and modern students is more developed visual and emotional memory. In this regard, the use of educational software that contains lots of educational information, is equipped with animated demonstrations, hypertext links, videos, and other multimedia attributes, facilitates the implementation of psycho-pedagogical approaches. At the same time established that the perception of a relatively large amount of text on the monitor screen is difficult, therefore, the text of this volume, with whom the student works must be in a printed textbook [19].

From the foregoing it can be concluded that in the modern scientific-methodical literature, computer technology in English language teaching: fully implement the principle of clarity in teaching; provides training tailored individual characteristics of students; maximize the use of analytical and imitative abilities of students; to fully mobilize their internal resources; to create conditions to control the formation of speech skills and abilities; to ensure self-control.

Computer technology amplifies human intelligence, promote the development of logical and operational thinking, specialize perception, thinking and memory [20].

The above is the basis for the formulation of priorities that follow from the requirements of Informatization of higher education in the aspect of training of future specialists electricity:

1) it is necessary to improve preparation of future electricity providers on the basis of systematic use of Internet technologies in higher education, revision of the organizational forms of educational activity, development of a package of educational-methodical documentation, taking into account the specific features of professional activity of specialists of electricity;

2) it is necessary to study the issues of preparation of future electricity providers methodology and practical recommendations of the forming qualities of a specialist, characterized by the ability to develop and make optimal use of modern information technology.

Future professionals need to be competitive and in demand in the labour market. Therefore, the aims of education are determined primarily on the basis of the requirements of the curriculum to knowledge and skills and the requirements of society to the development and education of the new generation. Future professionals need to be able to operate actively, make decisions, flexibly adapt to changing conditions of life.

We reaffirm the fact that the analysis of scientific sources and teaching practice in Khoja Ahmet Yasawi International kazakh-turkish University, the Department of the 'Pedagogical science' shows that the use of Internet technologies in the process of teaching English language of future specialists of

power industry is of great importance and promotes informational-communication competence of future professionals electricity providers. Scientific and practical research will be continued by us, and at this stage of our research we conclude about the significance and relevance of the use of information and computer technology in shaping the information and communicative competence of future specialists of power industry, modernization of educational process, updating the content of the subject of English for future specialists of pedagogy and psychology, which accordingly affect the change in the professional training of specialists of pedagogy and psychology.

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References

1. Kerimbaeva B. T., Iskakova P. K. To using Internet technologies of formation informational-communicative competence of future specialist. *Nauka i zhizn' Kazahstana.* [*Science and Life of Kazakhstan].* 2014. № 6 (27). P. 248–253. (Translated from Russian)

2. Kerimbaeva B. T., Berkimbaev K. M., Daribaev Zh. E., Nyshanova S. T. To the problem of forming future specialists' information communicative competence. *Aktual'nye problemy sovremennoj zhizni.* [*Actual Problems of Modern Life].* Kazakhstan, Karaganda. 2012. № 3 (83). P. 32–37. (Translated from Russian)

3. Zakharova I. G. Informacionnye tehnologii v obrazovanii. [Information technologies in education]. Moscow: Publishing House Academy, 2008. (Translated from Russian)

4. Nyshanova S. T., Berkimbaev K. M., Kerimbaeva B. T. To the problem of training of future specialists of power industry with the use of information technologies in the process of teaching English. *Mezhdunarodnyj zhurnal jeksperimental'nogo obrazovanija. [International Journal of Experimental Education].* № 8. P. 9–12. (Translated from Russian)

5. Polilova T. A. The implementation of computer technologies in foreign language teaching. *Inostrannye jazyki v shkole.* [*Foreign Languages in School].* 1997. № 6. P. 2–7. (Translated from Russian)

6. Den A. The role of computer technology in the formation of learning and cognitive competence at students of the senior phase of learning the Korean language. *Problemy i perspektivy razvitija obrazovanija: materialy Mezhdunarodnoj nauchnoj konferencii. The Problems and Prospects of Education Development. Materials of International Scientific Conference].* 2010. Vol. II. P. 186–189. (Translated from Russian)

7. Trishina S. V. Informacionnaja kompetencija kak pedagogicheskaja kategorija. [Informational competence as a pedagogical category]. *Jejdos. [Eidos].* 2005. Available at: http: www.eidos.ru/journal/2005/0910–11/htm. (Translated from Russian)

8. Sysoev P. V., Evstigneev M. N. Metodika obuchenija inostrannomu jazyku s ispol'zovaniem sovremennyh informacionno-kommunikativnyh Internet-tehnolo-

gij. [Methods of teaching foreign language the using of modern informational-communication]. Moscow; Rostov-on-Don: Publishing Houses Glosa Press; Phenix, 2010. 189 p. (Translated from Russian)

9. Sysoev P. V. Direction and prospects of informatization on language education. Vysshee obrazovanie v Rossii. [*Higher Education in Russia*]. 2013. № 10. P. 90–97. (Translated from Russian)

10. Tsepilova A. V. Some features of realization of competence approach in teaching professional foreign language student of physico-technical specialties. *Young Scientist*. 2010, April. № 4 (15). P. 384. (In English)

11. Ragulina L. V. Components, criteria and indicators of the communicative competence of teacher of high school. *Young Scientist*. 2010, February. № 1–2 (13). V. II. P. 290. (In English)

12. Bim I. L. Some actual problems of modern education foreign languages. *Inostrannye jazyki v shkole.* [*Foreign Languages in School*]. 2001. № 4. P. 5–8. (Translated from Russian)

13. Mikhailova E. B. Formation of professional and foreign language competence of students of engineering specialties in the conditions of informatization of education. *Vestnik RUDN. Serija: Informatizacija obrazovanija.* [*Bulletin of RUDN. Series Informatization of Education*]. 2010. № 3. (Translated from Russian)

14. Bogdan I. T. Innovational processes in modern education as the result of the development of a new educational paradigm. *Fundamental'nye issledovanija. [Fundamental Research]*. 2007. № 12. P. 480–481. (Translated from Russian)

15. Kruchinina G. A., Patyaeva N. V. Formirovanie professional'no-inojazychnoj kompetentnosti studentov inzhenerno-stroitel'nyh special'nostej v kontekstnom obuche-nii. [Formation of professional and foreign language competence of students of engineering specialties in the context of the training]. Nizhny Novgorod: NNGASU, 2008. (Translated from Russian)

16. Polat E. S. Internet for foreign language lessons. *Inostrannye jazyki v shkole.* [*Foreign Languages in School*]. № 2–3. 2001. (Translated from Russian)

17. Soboleva A. V. Using of multimedia technologies in foreign language teaching. *Pedagogika: tradicii i innovacii: materialy IV Mezhdunarodnoj nauchnoj konferencii, g. Cheljabinsk, dekabr' 2013 g. [Pedagogy: Traditions and Innovations. Materials of the IV International Scientific Conference. Chelyabinsk, December 2013]*. Chelyabinsk: Publishing House Two Komsomols, 2013. P. 119–123. (Translated from Russian)

18. Vladimirova L. N. Internet for foreign language lessons. *Inostrannye jazyki v shkole.* [*Foreign Languages in School*]. 2002. № 3. P. 39–41. (Translated from Russian)

19. Buran A. L. Pedagogical technologies used in teaching foreign languages with the use of informational-communications technology. *Molodoj uchenyj.* [*Young Scientist*]. 2011. № 12. Vol. 2. P. 81–85. (Translated from Russian)

20. Polat E. S. The Internet in humanities education. Moscow: Publishing House VLADOS, 2001. P. 153. (Translated from Russian)

Литература

1. Керимбаева Б. Т., Искакова П. К. Использование интернет-технологий в формировании информационно–коммуникативной компетенции будущих специалистов // Наука и жизнь Казахстана. 2014. № 6 (27). С. 248–253.

2. Керимбаева Б. Т., Беркимбаев К. М., Дарибаев Ж. Е., Нышанова С. Т. Проблемы формирования у будущих специалистов информационно-коммуникативной компетенции // Актуальные проблемы современной жизни. № 3 (83). С 32–37.

3. Захарова И. Г. Информационные технологии в образовании. Москва: Академия, 2008.

4. Нышанова С. Т., Беркимбаев К. М., Керимбаева Б. Т. К проблеме подготовки будущих специалистов электроэнергетики с использованием информационных технологий в процессе преподавания английского языка // Международный журнал экспериментального образования. № 8. С. 9–12.

5. Полилова Т. А. Внедрение компьютерных технологий в преподавание иностранных языков // Иностранные языки в школе. 1997. № 6. С. 2–7.

6. Ден А. Роль компьютерных технологий в формировании учебно-познавательной компетенции у студентов старшего этапа обучения корейскому языку // Проблемы и перспективы развития образования: материалы Международной научной конференции. Пермь, апрель 2011 г. Пермь: Меркурий, 2011. Т. II. С. 186–189.

7. Тришина С. В. Информационная компетенция как педагогическая категория // Эйдос [Электрон. ресурс]. 2005. Режим доступа: http: www.eidos.ru/journal/2005/0910–11/htm

8. Сысоев П. В., Евстигнеев М. Н. Методика обучения иностранному языку с использованием современных информационно-коммуникативных интернет-технологий: учебно-методическое пособие. Москва; Ростов-на-Дону: Глоса-Пресс; Феникс, 2010. 189 с.

9. Сысоев П. В. Направление и перспективы информатизации языкового образования // Высшее образование в России. 2013. № 10. С. 90–97.

10. Tsepilova A. V. Some features of realization of competence approach in teaching professional foreign language student of physico-technical specialties // Young scientist. 2010, April. № 4 (15). S. 384.

11. Ragulina L. V. Components, criteria and indicators of the communicative competence of teacher of high school // Young scientist. 2010, February. № 1–2 (13). V. II. S. 290.

12. Бим И. Л. Некоторые актуальные проблемы современного обучения иностранным языкам // Иностранные языки в школе. 2001. № 4. С. 5–8

13. Михайлова Е. Б. Формирование профессионально-иноязычной компетентности студентов инженерных специальностей в условиях информатизации образования // Вестник РУДН. Серия: Информатизация образования. 2010. № 3.

14. Богдан И. Т. Инновационные процессы в современном образовании как результат развития новой образовательной парадигмы // Фундаментальные исследования. 2007. № 12. С. 480–481.

15. Кручинина Г. А., Патяева Н. В. Формирование профессионально-иноязычной компетентности студентов инженерно-строительных специальностей в контекстном обучении. Нижний Новгород: ННГАСУ, 2008.

16. Полат Е. С. Интернет на уроках иностранного языка // Иностранные языки в школе. 2001. № 2–3.

17. Соболева А. В. Использование мультимедийных технологий в обучении иностранным языкам // Педагогика: традиции и инновации: материалы IV Международной научной конференции, г. Челябинск, декабрь 2013 г. Челябинск: Два комсомольца, 2013. С. 119–123.

18. Владимирова Л. Н. Интернет на уроках иностранного языка // Иностранные языки в школе. 2002. № 3. С. 39–41.

19. Буран А. Л. Педагогические технологии, используемые в обучении иностранным языкам с применением информационно-коммуникационных технологий // Молодой ученый. 2011. № 12. Т. 2. С. 81–85.

20. Полат Е. С. Интернет в гуманитарном образовании. Москва: ВЛАДОС, 2001. 153 с.