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BUILDING LANGUAGE COMMUNICATIVE COMPETENCE IN THE NON-LANGUAGE ENVIRONMENT

The competence approach is currently the basis for teaching foreign languages for the students of technical specialties at universities, especially, if it is a foreign language for special purposes. Teaching a foreign language in the field of professional communication requires strengthening of interdisciplinary ties, integration of a foreign language and special disciplines. One of the main difficulties encountered by the students in the non-language environment is mispronunciation of a lot of English words and, especially, terms, which are not given in the course of General English. The only way to solve this problem is to introduce telecommunication technologies into learning process. Today the Internet provides a huge variety of materials on professional communication. The role of the teacher is to be a supervisor in this ocean of information. The experience of teaching Professional English at the Faculty of Physics and Technology, al-Farabi KazNU, has proved the efficiency of this strategy. The authors consider the methods used in watching and reproducing the video material. The advantages of using special videos (in particular, in physics) enable the students to improve their pronunciation, to learn new terminology, to develop speaking skills and to improve their ability to make presentations.

Key words: competence approach, telecommunication technologies, Internet resources, professional communication, video material, pronunciation, terminology.

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Тілдік емес ортада коммуникатив тілдік құзыретті қалыптастыру

Қазіргі таңда құзыреттілік тәсіл шет тілін оқыту барысында университеттердің техникалық факультетінің студенттеріне негіз болып табылады, әсіресе, арнайы мақсаттарға арналған шет тілін оқыту барысында. Шет тілін оқыту саласында кәсіби қарым-қатынас талап етіледі, пәнаралық байланыстарды нығайту, біріктіру, шет тілі және арнайы пәндер. Тілдік емес ортада студенттер арасында кездесетін негізгі бір қиыншылықтардың бірі, көптеген ағылшын тіліндегі сөздердің дұрыс айтылмауы, әсіресе терминдер жалпы ағылшын тілі курсы кезінде берілмейді. Бұл мәселені шешудің жалғыз жолы – телекоммуникациялық технологияларды оқыту үрдісі кезінде енгізу. Қазіргі таңда ғаламтор кәсіби ағылшын тілін қолдануға көптеген материалдарды қамтиды. Мұғалімнің рөлі мынада, көптеген мәліметтерді іздеуге басшылық ету. Әл-Фараби атындағы ҚазҰУ-дың физика-техникалық факультетінде кәсіби ағылшын тілін оқыту тәжірибесін осы стратегия арқылы тиімділігін дәлелдеді. Мақаланың авторлары қарап шығу және бейне ойнату кезінде пайдаланылатын әдістерін қарайды. Арнайы бейнематериалдарды пайдалану артықшылықтары (атап айтқанда, физикадан) студенттерге сөздердің айтылу жағын жақсартуға, жаңа терминдерді жаттауға, ауызша сөйлеу дағдыларын дамытуға және презентациялар жасау қабілетін жақсартуға мүмкіндік береді.

Түйін сөздер: құзыреттілік, телекоммуникациялық технологиялар, интернет-ресурстар, кәсіби қарым-қатынас, бейнематериалдар, айтылу, термин сөздер.

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Формирование коммуникативной языковой компетенции в неязыковой среде

В настоящее время компетентностный подход является основой для обучения иностранным языкам студентов технических факультетов университетов, особенно при обучении иностранному языку для специальных целей. Обучение иностранному языку в области профессионального общения требует укрепления междисциплинарных связей, интеграции иностранного языка и специальных дисциплин. Одной из основных трудностей, с которыми сталкиваются студенты в неязыковой среде, является неправильное произношение многих английских слов, и особенно терминов, которые не даются в общем курсе английского языка. Единственный способ решить эту проблему – внедрить телекоммуникационные технологии в процесс обучения. Сегодня Интернет предоставляет огромное количество материалов по использованию профессионального английского языка. Роль учителя заключается в том, чтобы руководить поиском в этом океане информации. Опыт преподавания профессионального английского языка на физико-техническом факультете КазНУ им. аль-Фараби доказал эффективность этой стратегии. Авторы статьи рассматривают методы, используемые при просмотре и воспроизведении видеоматериалов. Преимущества использования специальных видеоматериалов (в частности, по физике) позволяют учащимся улучшить свое произношение, изучить новую терминологию, развить навыки устной речи и улучшить их способность делать презентации.

Ключевые слова: межкультурная коммуникативная компетентность, информационная и образовательная окружающая среда, иностранный язык, медиаобразование, электронные образовательные ресурсы, содержание, технологии.

Introduction

Although the concept of the competence approach in education appeared as early as in the 1960-1970s, it still plays an important role in teaching foreign languages. This can be explained by many objective reasons: science has accumulated a huge amount of information, which is constantly renewed, in modern conditions it is necessary to train competitive specialists who can communicate without an interpreter in the professional environment, who themselves can find the information they need and contact co-workers of the international team.In the 1980sthe British linguistHymes (Daniel Coste. https://www.cairn-int.info/article-E_LS_139_0103--hymes-and-the-palimpsest-of-communicativ.htm) suggested the new concept that the knowledge of language is not only includes the knowledge of language structure, but also the knowledge of how to *use* language *appropriately* depending on the subject of communication. Hymes called this approach to teaching language development of *communicative competence*.

The competence approach in teaching a foreign language means the development of the ability to use language in communication, not just in translating texts. The study of a foreign language at the first stage of higher education – at the bachelor's level – is to be aimed at the development of a communicative competence. It is also necessary to orient on the development of communicative competence in the courses of «Professional foreign language» and «Foreign language for professional communication» because very often our textbooks are limited to learning vocabulary and translation of scientific texts often not related to the specialty of the student. Therefore to teach the student to use the professional foreign language in the real environment it is necessary to reproduce this environment in the classroom. It can be reproduced through imitation of professionally oriented situations which attract students' interest, solving problems, role-playing, organization of projects and brainstorming.

The competence approach is a powerful tool used in teaching foreign languages, and it is effectively applied in the course of a foreign language for special purposes. In teaching a foreign language for professional communication for the students of technical specialties it is necessary to use information from technical disciplines, to combine a foreign language and special disciplines. It is necessary to develop not only communicative, but also other professionally important competencies. When a foreign language is taught to technical students in the framework of a competence approach the teacher should develop professional and communicative

competence in a foreign language in the process of solving practical and theoretical problems.

Experimental part

The main components of achieving positive results in teaching English to technical students are a target-oriented organization of the learning process, professionalism of the teacher and motivation of the students. The student should be able to use words and grammatical constructions in spontaneous speech, and not just to know the theoretical material. To teach a student to feel confident in a real life situation, in a lesson he should be put in such conditions, in which he could solve actual problems using the studied language, which means that he must be able to prove, disprove, agree or disagree with something.

Communicative competence means skills of direct and indirect communication, the first skill includes speaking and listening and the second one reading and writing. Direct or oral communication has two sides and therefore it is impossible without understanding the speech of the other person, as when you contact a person you are simultaneously a speaker and a listener. In teaching technical students it is important to answer the question whether all means of communication are equally important. Should we develop all four means equally or some of them should dominate? In all modern textbooks on General English published in the countries of the studied language all four skills get equal attention. However, in the textbooks on technical English, for example, Professional English in Use: Engineering, there are no materials for listening. The main accent is made on learning terminology. The same approach is used in the textbooks on English for specific purposes published in our country or in Russia, which are oriented on learning vocabulary and grammar. The students learn to write but are not able to speak. Students have to learn a lot of words and phrases in order to use them in their speech, but without practical application they are quickly forgotten. Many students of engineering specialties did not pay much attention to this subject at school and very few hours of foreign language in the timetable do not allow them to overcome the situation of poor knowledge of the studied language.

The other problem in teaching English communication to students of technical specialties is the problem of pronunciation. Very often it is caused by incorrect pronunciation of the English teachers at school and is further worsened by mistakes in pronunciation of university teachers. Therefore

when students hear the words on the recording they are not able to recognize them. During the hours provided for speech practice it is difficult to come to subconscious comprehension of the language. Students are not ready for oral perception of the English language. One of the ways to solve this problem is to introduce telecommunications technologies into the learning process.

However, the main purpose of the subject «Professional foreign language» is still often stated as learning English through reading special texts (Popolzina. http://euroasia-science.ru/filologicheskie-nauki/the-chief-criteria-in-selecting-original-texts-for-increasing-communicative-and-professional-competence-in-learning-english-in-higher-school/). Reading special texts is based on the general principles: learning new vocabulary and special terms, training grammar structures, and reference work on specialty. Due to new information technologies foreign texts are becoming more available, and students are getting opportunities of acquiring the habits of reading according to the qualifications which they are trained in the course of the curriculum. There is no doubt that this is a great advantage of modern technologies and it enables us to find the appropriate information for teaching in the special field of knowledge. However, this type of learning is again passive learning in the framework of reading practice.

Today the Internet provides a huge variety of materials on professional communication, which are presented not only by written texts but also by a lot of video materials though their levels are different and not everything is suitable for our students. The task of the teacher is to develop the assignments to be used by the students in their self-study and to provide appropriate control of fulfillment of these assignments.

For the purpose of learning Professional English at the Faculty of Physics and Technology, al-Farabi KazNU, we developed the following strategy. After careful studying of Internet resources we chose the video programs presented by the teachers of physics Dan Fullerton (Dan Fullerton. https://www.youtube.com/user/FizziksGuy) and Michel van Biezen (MichelvanBiezen. https://www.youtube.com/watch?v=W2mAna_PqAM), who presents video lessons not only on physics, but also on mathematics, astronomy, chemistry, mechanical and electrical engineering, which makes these videos extremely valuable for our students.

Prior to watching videos we had to work with different aspects in teaching professional language. First, it is vocabulary in the context, as everybody

knows that every English word has a lot of different meanings. The other problem was reading scientific texts. Here we faced two problems: the first one was pronunciation and the second was reading formulas. Both problems could be solved using videos on the corresponding themes. It was necessary to start from reading simple arithmetical expressions such as:

$$4c + W_3 + 2m_1a^1 + R_a + 33^{1/3},$$

which is read as: 4c plus W third plus 2 m first a prime plus R a-th equals thirty-three and one third

Then we moved to more complicated formulas.

$$\Delta S = S_2 - S_1 = \int_{T_1}^{T_2} \frac{\Delta q}{T}$$ *Delta S is equal to S sub two minus S sub one is equal to the integral from T sub one to T sub two of delta q over (by) T.*

$$\beta = \frac{d\omega}{dt} = m(g-a)r - M_0 - k\omega.$$

To learn grammar in the context we used such exercises as [Strautman, 2017: 75]:

1. Although the exact lifetime of one particular nucleus cannot_____ (predict), the mean or average lifetime of a sample containing many nuclei of the same isotope can _____ (estimate) and measured. 2. The force between two objects _____(describe) as the exchange of a particle. 3. The electrons in an atom _____ (bind) to its nucleus by electromagnetism. 4. If the movie _____ (run) backwards through the projector, could you tell from the images on the screen that the movie was running backwards?

The texts from the course of physics and video presentations were used in order to teach students to speak English properly, to pronounce the words correctly, to learn how to read formulas. Physics and Mathematics YouTube lessons were used as examples for presentations. Here we can provide some examples of the texts:

Let us consider the product of several variables having different powers:

$$A = B^{\alpha} \cdot C^{\beta} \cdot E^{\gamma}...$$

The relative standard error of the value of *A* for independent *B, C, E...* can be obtained using the formula

$$\left(\frac{S_A}{A}\right)^2 = \alpha^2\left(\frac{S_B}{B}\right)^2 + \beta^2\left(\frac{S_C}{C}\right)^2 + \gamma^2\left(\frac{S_E}{E}\right)^2 + ...$$

From these examples it is seen that it is impossible to teach students working with such texts without knowing how to read such formulas, which can be found in the video materials in the Internet. In the classroom we used the following stages of working with video lessons:
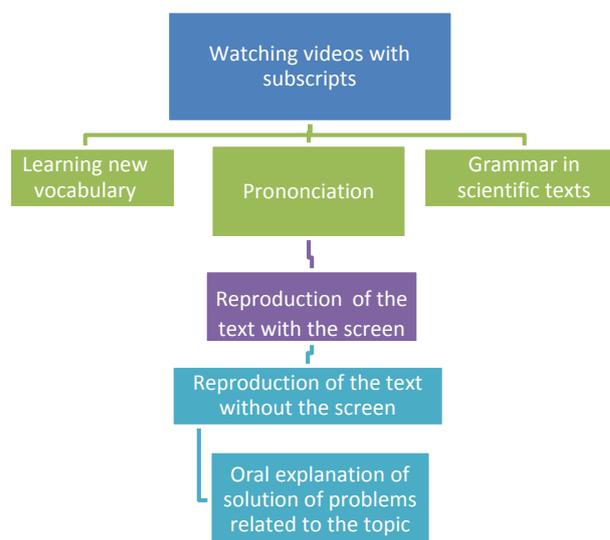
Results and discussion

The use of appropriate Internet video resources enables the students to solve the following problems:

1. To improve the pronunciation, especially, to learn how to read formulas and to pronounce physical terms properly.

2. To improve grammar skills though using them in scientific texts.

3. To improve speaking skills by reproducing the texts of the videos.

4. To learn how to make real presentations based on the material presented in the videos.

Conclusion

The results of video lessons can be used at the lessons on special disciplines. The choice of video material should depend on the level of the group. However, it will be useful for any group of students as a motivating material for learning English, which will provide them access to the world of professional language.

Литература

Daniel Coste et al. Hymes and the Palimpsest of Communicative Competence: A Journey in Language Didactics // https://www.cairn-int.info/article-E_LS_139_0103--hymes-and-the-palimpsest-of-communicativ.htm.

Popolzina L. The chief criteria in selecting original texts for increasing communicative and professional competence in learning English in higher school //http://euroasia-science.ru/filologicheskie-nauki/the-chief-criteria-in-selecting-original-texts-for-increasing-communicative-and-professional-competence-in-learning-english-in-higher-school/.

Dan Fullerton. Aplusphysics //https://www.youtube.com/user/FizziksGuy.

Michel van Biezen//https://www.youtube.com/watch?v=W2mAna_PqAM.

English for Physicists.L.E. Strautman, Sh.B. Gumarova et al – Алматы, 2017 – 125c.

References

Daniel Coste et al. Hymes and the Palimpsest of Communicative Competence: A Journey in Language Didactics // https://www.cairn-int.info/article-E_LS_139_0103--hymes-and-the-palimpsest-of-communicativ.htm.

Dan Fullerton. Aplusphysics //https://www.youtube.com/user/FizziksGuy.

English for Physicists.L.E. Strautman, Sh.B. Gumarova et al. – Almaty, 2017. – 125p.

Michel van Biezen // https://www.youtube.com/watch?v=W2mAna_PqAM.

Popolzina L. The chief criteria in selecting original texts for increasing communicative and professional competence in learning English in higher school //http://euroasia-science.ru/filologicheskie-nauki/the-chief-criteria-in-selecting-original-texts-for-increasing-communicative-and-professional-competence-in-learning-english-in-higher-school/.