

XV International Conference "Linguistic and Cultural Studies: Traditions and Innovations", LKTI
2015, 9-11 November 2015, Tomsk, Russia

Pedagogical Conditions for Developing the Professionally Oriented Communicative Competence in a Technical University

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Abstract

The article considers the development of professionally oriented communicative competence that provides intercultural connection between specialists of radically different countries. The authors of the research make an attempt to identify the particular conditions, applicable to a technical university in the process of foreign language studying. As a result of it, the following conditions are found out: theoretical preparation of students in learning strategies' development; structuring the academic process according to the educational brunch; use of the effective educational area.

These conditions are supposed to be optimal for foreign language professionally oriented communicative competence's development.

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Peer-review under responsibility of the Scientific Committee of LKTI 2015.

Keywords: Pedagogical conditions; foreign language; skills; technical university; communicative competence.

1. Introduction

The key goal of technical universities nowadays in a program of foreign language teaching, according to Federal State Education Standards in Russia is the development of professionally oriented communicative competence that provides intercultural connection between specialists of radically different countries. In this case the education should be more oriented to the shaping of students' abilities to operate multidisciplinary knowledge in the situations

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of academic and professional issues.

The purpose of the research is to find out what education environment would create the necessary conditions for professionally oriented

communicative competence's development in a technical university. To get it the following objectives are solved in the paper:

- Literature analysis of Russian and foreign researchers about the indicated issue was studied
- Education Standards within technical universities and skills that are required for technical university graduates were observed
- Academic Content (areas of communication, topics, situations, language material and rules of its operating) of foreign language program in a technical university was investigated
- Questionnaire among students to define main skills from their point of view for future specialists of Engineering field was organized

The place of an experimental work was the Institute of Power Engineering in TPU.

The questionnaire was conducted among students of the third course, as the first year representatives who begin studying Professional Foreign Language (in Tomsk Polytechnic University, Russia, hereafter referred to as TPU, the course of Professional foreign language starts at the third course). The result of it was outlined skills that help students be ready for professional activity, among these are:

- ability to feel confident about interdisciplinary material given in English
- ability to negotiate with partners and groupmates
- ability to pose individual arguments in oral presentations
- ability to teach and be taught one another
- ability to introduce a variety of solutions for the stated problem (Kachalov & Sobinova, 2014).

Literature analysis (Andreev, 2000; Harmer, 2001; Korthagen, 2001; Littlewood, 2008; Mosina, 2001; Oxford, 2003; Rostovtseva, 2011; Zmeev, 2009) and Education Standards review highlights the fact that graduate of a technical university should: 1) know the basic peculiarities of language behavior and typical field of professional communication; 2) possess ways of materials' getting, processing and operating; 3) use received knowledge in appropriate communicative situations.

As for the Academic Content, it involves such Modules as:

- 1) Career planning (fall term);
- 2) Employment (fall term);
- 3) Engineering communication (fall-lent terms);
- 4) Object of Engineering activity (lent term);
- 5) Engineering design (lent term).

After the careful analysis of acquired data, the authors of the present paper made an attempt to create a methodology that reflects all the education tricks in a technical university.

2. Methodology

The demands for teaching foreign languages at a particular stage of social development are closely connected with the appearance of new approaches in studying them.

The up-to-date approach to teach in conditions of modernization in Educational System is a Competence Approach, which is considered as a theoretical base of constructing an educational foreign language system. The general function of this approach is to focus the attention on the results of teaching, otherwise on the ability of student to act efficiently and independently in different practical situations (Rostovtseva, 2011).

According to the previous statement, the graduate of university should possess not only a complex of knowledge and skills in quasi-professional and professional activities, but also should be ready to use these skills in practical situations.

One of the main conceptual points of FSES HVE (Federal State Education Standards of Highest Vocational Education) concerning the foreign language program in a technical university is knowledge of the language regardless of a studying brunch. Accordingly, the basic goal is developing abilities to correlate language resources with the definite spheres, situations, conditions and problems of communication. That is why it is necessary to pick out the foreign language professionally oriented communicative competence, which gives an opportunity for students to be integrated in the international professional sphere and to use it as a way of multicultural connection, academic, professional mobility and competitiveness (Kachalov & Sobinova, 2014).

For realizing the educational process of shaping foreign language professionally oriented communicative competence it is necessary to establish definite pedagogical conditions, optimizing the development of particular skills.

Firstly, we follow V. I. Andreev's point of view about understanding the pedagogical conditions as a purposeful selection and use of content elements, methods, also organizational forms of teaching, contributing to the effective forming of foreign language professionally oriented communicative competence for technical university students (Andreev, 2000). In our opinion, such conditions for studying a foreign language in technical universities are the following:

- theoretical preparation of students in learning strategies' development
- structuring the academic process according to the educational brunch
- use of the effective educational area

Let us make a detailed watch on each issue and the influence of it on the general formation of the competence mentioned above.

2.1. Theoretical preparation of students in learning strategies' development

Producing the educational strategies in any sphere begins with determination of activity brunches, the aim of the activity, then it becomes possible to make a plan to achieve it. Under the term "learning strategy" we share M. A. Mosina's definition "the way of the reader to the desired result, which defines the right way, provides the procedure of the action, excepting the randomness of it" (Mosina, 2001).

That is a well-known fact, that the correctly determined aim for any activity is generally a half part of the successful result of this process.

But the primary point in choosing learning strategies is the sequence of activities undertaken by, which are necessary to achieve this aim. Exactly, these are activities, allowing to mobilize students' knowledge in their professional field, reflecting the strong sides and hiding the weak ones.

The classification of R. Oxford seems to be the best of all diversity of classifications because of its completeness and accuracy. This classification includes 6 groups of learning strategies, they are: memorization strategy (refers to the fact, how students remember the material), cognitive strategy (refers to what the students study), compensatory strategy (helps students to compensate the lack of linguistic knowledge), meta-compensatory (refers to the fact, how students catch the academic material), affective (refers to the feelings and emotions during the educational process) and social (assumes a cooperation).

Let us get back to the statement that the base of foreign language teaching in a technical university is the activity, connected with methods of processing, absorption and mastering the material. Without diminishing the importance of other strategies, we suppose that cognitive strategies are priority ones, giving the students a chance to make their trajectory of studying.

So, cognitive strategies in foreign language professionally oriented communicative competence's development for students of technical universities during the educational process associate like the complex of scientific and theoretical knowledge and methods of achieving important information, connected with understanding the learning material, saving it in the memory, ability to use this information (Hood, 2002).

In our opinion, the main result of this pedagogical condition is the development of such skills like abilities which provide the understanding of the material in educational conditions; use efficient methods of brainwork, which

provide the achievement of a posed aim.

2.2. Structuring the academic process according to the educational brunch

The informative part of any educational process is based on the definite approaches. While teaching the foreign language in a technical university, the professionally oriented approach acquires a special education, which contains the teaching, based on the needs of students in studying the foreign language according to the features of his/her future profession or specialty.

We suppose that such an approach continues logically the basic ideas of the competence approach, which is the major one in the modern conditions of professional higher education and contributes the creation of friendly pedagogical conditions for development of necessary skills.

Teaching, based on the pointed approaches, includes the professional directivity not only on the contents of educational materials, but also on the activities, contains methods and operations of usage the information, forming the professional skills with a help of foreign language.

The professional directivity of foreign languages teaching acquires the lecturer to integrate the profiling subjects in his/her subject. Also, the directivity sets the goal to teach a student to use foreign language as a method of systematic refill of his/her professional knowledge on the basis of interdisciplinary connections that means forming educational contents depending on the educational line of a graduate.

So, it is valid to consider contents of foreign languages teaching in a technical university as a complex, which students should learn during the educational process, in order the quality and level of language knowledge match with their requests and goals.

On this viewpoint, we guess that it is necessary to include the next items:

- Spheres of communication activities, themes and situations, considering the professional direction of students
- Language material and rules of its use
- Complex of oral skills, which describes the level of practical knowledge of the foreign language as a method of communication

According to these items, it seems appropriate to follow the next methodological principles, defining the character of studying process:

- The principle of communicative educational directivity is realized as an active way of teaching, which means that students solve the educational problem by means of the foreign language. As a result they achieve a cognitive level, which suppose the practical usage of gained skills in oral or writing forms.
- The principle of informative educational directivity, implying the informational saturation during the education that widens the professional thesaurus of the student. The information should be actual and reliable.
- The principle of educational results' actualization means the immediate practical use of knowledge and skills due to the foreign language.

We, as well as S. I. Zmeev (2009), tend to think that described principles make friendly pedagogical conditions of foreign language professionally oriented communicative competence's development, namely the ability to work with different kinds of material, containing the professional information, decide educational issues, talk, exchange the professional information, and apply knowledge in a verbal communicative form.

2.3. Use of the effective educational area

The correctly organized educational area is one of the conditions of realizing the educational process.

During the development of language professionally oriented communicative competence, the main goal of a teacher is the creation of such an area, which provides the complete support of students' activities.

We strongly believe that the electronic educational area LMS Moodle (Learning Management System Modular Object-Oriented Dynamic Learning Environment) matches these conditions, which acts successfully and develops

continuously in the modern educational conditions. Under this term the complex educational area, allowing removing the educational process into the electronic form is considered. Nowadays the education, built on Moodle, is organized in many huge universities abroad. The program is translated on more than 75 languages, also on Russian. There are more than 250 Russian websites of educational establishments, working on Moodle platform. Electronic educational area Moodle was being projected according to the pedagogics of social education, which includes a cooperative work “teacher-student” and active instructing.

It is difficult to overestimate all advantages, which are possible in this area. This area gives a chance for teachers not only to organize an efficient feedback with students and to check knowledge quickly, but also to change the structure of lecturing materials and practical classes in accordance with new goals.

So, we can review Moodle not only as a way of education, but also as a way of an interactive cooperation between the participators of educational process.

Consequently, creation of efficient educational area allows making the process of teaching the foreign language more informative and stimulating with a help of media technologies. As a consequence of this process, the skills to get, save, use, interpret, assign and reproduce are developed via modern media technologies. The development of these skills forms foreign language professionally oriented communicative competence.

3. Conclusion

According to all information above, organization of conditions, mentioned previously, will generally allow realizing maximally the development of necessary skills, including into the foreign language professionally oriented communicative competence.

Pointed skills will give the opportunity to optimize the professional preparation of specialists, providing the connection between organizational, scientific and personal aspects. Also it helps graduates of a technical university deal with different professional problems, to decide them creatively, to improve themselves without special issues.

4. Further development

One of the major prospects for this research is the possibility to improve acquirments in further academic and professional activities that TPU held annually. Among those are diverse intercultural projects like Lingua Exchange (America-Russia); Mobility Programs (Prague, Germany, Canada, Spain); grants; summer schools. Moreover, the development of foreign language professionally oriented communicative competence expands the area of employment and studying (an opportunity to get Double Degree Diploma in international programs). In any case, these skills are definitely crucial both for studying and working.

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