"Edukacja – Technika – Informatyka" nr 1/23/2018 www.eti.rzeszow.pl

DOI: 10.15584/eti.2018.1.43

OKSANA SYNEKOP

Competency-Based Approach in Differentiated Instruction of English for Specific Purposes to it-Students

Doctor of Philosophy, assistant professor of Department of English for Engineering, Faculty of Linguistics, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Ukraine

Abstract

The article considers the competency-based approach in differentiated instruction of English for specific purposes at university level. It also outlines professional communicative foreign language competence and interdisciplinary competence for successful differentiated instruction of English for specific purposes to information technology students of universities.

Keywords: differentiated instruction, English for specific purposes, professional communicative foreign language competence, interdisciplinary competence, information technology students, university

Introduction

Competency-based approach, one of the most important approaches in contemporary higher education, is focused on achieving such information technology (IT) student's learning aims as "demonstrating the ability to learn, self-determination, self-actualization, socialization and development of individuality" (Zeer, Symanjuk, 2004, p. 25). Its urgency is caused by the following tendencies: increasing world integration and connectivity, continuously growing processes of harmonization of the whole system of higher education, constant increase of the volume of information, which leads to a change of information management, the rapid growth and introduction of new technologies (Zeer, Symanjuk, 2004, p. 25). So, after graduating from universities future specialists in the field of IT have to be able to adapt to steadily changing reality, be ready to establish interpersonal and professional relationships, master and be ready constantly improve knowledge in the IT field and also have a good command of English for specific purposes.

In education various aspects of competency-based approach have been studied by scientists. For example, Dugas and DesRosiers consider skills for social

competence (Dugas, DesRosiers, 2010); Kirjazovaite outlines the components of intercultural competence, and how can they be measured (Kirjazovaite, 2009), Rickheit, Strohner, and Vorwerg discuss the theoretical, methodological, and practical relevance of the notion of communicative competence (Rickheit, Strohner, Vorwerg, 2008) etc.

Also this approach is dominant in differentiated instruction because in the heterogeneous university groups each student develops in his/her own pace, depth mastering necessary competences (as desirable learning aims and outcomes) in the learning process. Thus, exploring the problem in the context of learning English for specific purposes to IT students, we are going to outline the competences that should be formed at language proficiency level B2 in the process of differentiated instruction at university.

Professional communicative foreign language competence in competencybased approach of differentiated instruction

Competence is an ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development (Terminology of European Education and Training Policy 2014: 20). So, the focus of the notion "competence" is on individual or social needs (DeSeCo, 2001, p. 8), that are satisfied in the process of learning and professional activity, and also knowledge and abilities of an individual that meet accepted standards and can be "improved through learning, development and experience" (Competency Models..., 2015).

As the learners are engaged in foreign language communication it is possible to develop their communicative competence. According to R. E. Cooley and D. A. Roach, communicative competence refers to the knowledge of effective and appropriate communication patterns and the ability to use and adapt that knowledge in various contexts (Cooley, Roach, 1984). The communicative foreign language competence of IT-students at university level is focused on the job-related context that aims at satisfying their future special needs in professional environment. So, in this case the educators use the term "professional communicative foreign language competence".

In the center of learning process there is, firstly, a personality, that is able to communicate at the intercultural level, which implies an acceptable interaction with representatives of other cultures; secondly, an activity component that is implemented in a foreign language environment in order to meet professional needs. Summarizing all the above, we interpret professional communicative foreign language competence as a synthesis of knowledge, skills and abilities of IT-student, which allows him/her to realize foreign language communication in the professional activities and constantly improve it in the process of learning, development and gaining experience.

Communicative foreign language competence can be represented as comprising different components. For example, National Curriculum for Universities includes linguistic, socio-cultural, sociolinguistic, pragmatic and professional communicative language competences (English for Specific Purposes, 2005); the Common European Framework recommends linguistic, sociolinguistic and pragmatic competences (Common European Framework..., 2001). Nikolaeva considers communicative language competence as a sum of linguistic, speechactivity, linguosociocultural, learning-strategic competences. To summarize, it should be noted that linguistic and sociolinguistic competences are common for all models of communicative language competence. The last model is the most systematic, and therefore is optimal for our study (Nikolaeva, 2013). So, we need to clarify linguistic, speech-activity, linguosociocultural, learning-strategic sub-competences of professional communicative foreign language competence in the context of differentiated instruction of IT students. Traditionally, competences of language learners consist of declarative knowledge (resulting from experience) and procedural knowledge (active form of declarative knowledge), skills and abilities (Common European Framework, 2001).

Linguistic competences includes lexical, grammatical and phonological competences which are formed for the implementation of foreign language communication of students in professional situations as required by the target B2 level of language proficiency in technical universities. It means that students do not need deep linguistic knowledge but knowledge (lexical, grammatical, phonological) that allows them to solve professional tasks in IT sphere. The dominant competence is considered to be lexical one. In this case, special disciplines are the main source of enriching students' English language vocabulary by terms, professional jargons, phrasal verbs of the IT field.

Next competence is speech-activity that is realized in listening, speaking, reading and writing. Speech-activity competence in listening includes *declarative knowledge* (extracting specific, general and detailed information; the ways of expressing the attitude); *procedural knowledge* (how to predict the main content of the audio text on professional subject, to get the specific information in the audio text, how to understand the logical structure of the audio text, to track complex argumentation; how to systematize information, to understand the speaker's intention); *skills* (to understand the main, specific and detailed information of professional audio texts (on familiar and non-familiar topics) of discussions, debates, reports, lectures, conversations delivered in standard dialect and at average speed; to understand different points of view, the attitude of the speaker to the subject of conversation, to evaluate professional information; to determine the logical sequence of the actual material and a number of complex arguments of the audio text).

Speech-activity competence in speaking comprises declarative knowledge (in spoken production: informing about personal skills, innovations in IT, ad-

vantages and disadvantages in presentations, the sequence of instructions; persuading the listener to agree or disagree with an argument on professional subject; describing IT-products, tables, drawings, schemes; in spoken interaction: peculiarities of discussion, interview, debate, negotiation, information exchange on professional subject), particularities of nonverbal communication, English phrases for communication, cohesive devices; procedural knowledge (how to begin, constructively support and successfully complete the monologue and dialogue, how to analyze and argue the professional information, give examples, comment mathematical equations, facts, explain, demonstrate the results of the research, quote scholars, how to describe the sequence of the implementation of the instruction, outline advantages and disadvantages, how to inform about personal characteristics, strengths and weaknesses, skills and experience during the interview, explain certain professional issues; how to generalize the opinion of several speakers, how to ask an interlocutor to repeat, clarify, paraphrase, how to invite an interlocutor to join to a discussion; how to express emotions and personal opinion on professional topics); skills (give clear, systematic and detailed presentations related to professional interests; deviate spontaneously from a prepared text or questions, demonstrating fluency and ease of expression; consistently develop clear argumentation, focusing on additional details if necessary, giving advantages and disadvantages of different points of view; speak on a professional topic with a degree of fluency and spontaneity that does not cause difficulties for the listener; give expanded commentaries to statements, mathematical equations, drawings, tables, graphs; speculate about causes or consequences in conversations, exchange complex information, synthesize information from different sources, develop ideas in the process of discussing, actively participate in discussions, interviews on familiar professional topics, take initiative in a conversation, arrange meetings).

Speech-activity competence in reading includes *declarative knowledge* (extracting general, specific and detailed information; stylistic peculiarities of professional texts such as scientific articles, essays, reports, documentation, business letters; cohesive devices), *procedural knowledge* (how to analyze the text, outline and critically evaluate information on professional topic); *skills* (read with a high degree of autonomy authentic texts and understand essential, specific and detailed information of scientific articles, reports, documents, business letters related to specialty; identify writer's viewpoints in authentic texts).

Speech-activity competence in writing comprises *declarative knowledge* (stylistic peculiarities of texts related to professional topics; cohesive devices); *procedural knowledge* (how to plan, organize, give arguments; illustrate the texts by examples, tables, statistical data, mathematical equations); *skills* (write clear, accurate, detailed and well-structured texts such as: for and against essay, informative report, survey report, instruction, comment, abstract, conference

proceeding, specification, summary, business letters for personal and professional purposes; analyze, compare, synthesize and evaluate information from different sources; consistently expand argument, outline advantages and disadvantages.

According to our research linguosociocultural competence means an ability of IT-students to interact effectively and appropriately with the participants of different cultures in the process of foreign language communication for solving professional issues. This competence consists of *declarative knowledge* (about terms, phrasal verbs, linguistic markers; peculiarities of communication between co-workers of IT-company, at conferences, business meetings); *procedural knowledge* (how to implement intercultural communication taking into account the linguosociocultural context in professional situations; *skills* that are based on the use knowledge in order to achieve interpersonal understanding in foreign language communication in professional situations.

Learning-strategic competence refers to an ability of an IT-student to use rational techniques that prevent communication difficulties and preserve communication on professional topics in learning process. *Declarative and procedural knowledge and skills* include paraphrasing, translation, using associations for memorizing, making up a plan, cooperating in the process of communication, using synonyms, mimics and gestures.

Interdisciplinary competence in competency-based approach of differentiated instruction

The next relevant competence in our study is interdisciplinary. It is synthetic and combines a certain complex of knowledge, skills and attitudes, that are acquired by a student during mastering all content of education; it is not related to a particular subject, but it can be acquired during mastering several subjects at the same time (Pometun, 2004, p. 21). Consequently, in the context of differentiated instruction interdisciplinary competence is a synthesis of abilities, knowledge and skills that are acquired in a complex way by an IT student within the framework of the professional content learning. Interdisciplinary competence includes the ability to conduct a technical study through demonstration of profound knowledge and skills in the technical field; realization of independent, systematic study of the object of research in order to generate new theoretical and practical knowledge.

Conclusion

This study focuses on competency-based approach that is dominant in differentiated instruction of English for specific purposes at university level because it is oriented on mastering competences, as desirable purpose and result, by IT-students in their own pace, depth. As IT-students are involved in professional foreign language communication, it is possible to outline professional communicative foreign language competence (linguistic, speech-activity, linguosociocultural, learning-strategic competences) and interdisciplinary competence for successful differentiated instruction in teaching English for specific purposes. Considering the specifics of these competences ensures the development of students' skills that help a person adapt to rapid changes in IT field, constantly improve knowledge and also have a good command of English for specific purposes.

References

- Definition and Selection of Competencies: Theoretical and Conceptual Foundations (DeSeCo). (2001). DeSeCo Background Paper.
- Competency Models for Enterprise Security and Cybersecurity. Research-Based Frameworks for Talent Solutions. (2015). Apollo Education Group. University of Phoenix.
- Common European Framework of Reference for Languages: Learning, Teaching, Assessment. (2001). Language Policy Unit, Strasbourg.
- Cooley, R.E., Deborah, A.R. (1984). A Conceptual Framework, in Competence in Communication: A Multidisciplinary Approach, ed. Robert N. Bostrom. Beverly Hills, CA: Sage.
- Dugas, D.W., DesRosiers, R.T. (2010). Speaking by Speaking. Skills for Social Competence. Compass Publishing.
- English for Specific Purposes (ESP). National Curriculum for Universities. (2005). Kyiv. British Council, Ukraine.
- Kirjazovaite, L. (2009). Reflections Based on Ideas from Intercultural Competence. Round Table. Rome, Italy.
- Nikolaeva, S.Y. (red.) (2013). Methods of Teaching Foreign Languages and Cultures: Theory and Practice: a Textbook for Students. Classical, Pedagogical and Linguistic Universities. Kyiv: Lenvit.
- Pometun, O.I. (2004). Discussion of Ukrainian Teachers around Introduction Issues of Competence-based Approach in Ukrainian Education. Competence-based Approach in Modern Education: World Experience and Ukrainian Perspectives. Kyiv, 64–70.
- Rickheit, G., Strohner H., Vorwerg C. (2008). *Handbook of Communication Competence*. Ed. G. Rickheit, H. Strohner, Mouton de Gruyter, Berlin, New York.
- Terminology of European Education and Training Policy. A Selection of 130 Key Terms (2014). Luxembourg: Publications office of the European union.
- Zeer, J., Symanjuk, J. (2004). Competence-based Approach to the Modernization of Vocational Education. Higher Education in Russia, 4, 23–30.