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Retrospective Analysis of Studies on Differentiated Instruction of English for Specific Purposes

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Abstract

The article represents the historical analysis of differentiated instruction of English for specific purposes at university level. It also defines the factors contributing to successful use of differentiated instruction in teaching English for Specific Purposes to information technology students of universities.

Keywords: differentiated instruction, English for specific purposes, teaching-learning process, factors of successful English language teaching, information technology students, university

Introduction

The globalization process in the world demands the technical professionals who could effectively communicate in English to meet their needs. So, educators need to explore the tools that could optimize the teaching-learning process. One of them used among educators is differentiated instruction that involves the needs of a wide range of learners. Exploring the problem, we are going to outline the historical retrospective of differentiated instruction of English for specific purposes at university and define the factors contributing to successful use of differentiated instruction in teaching English for specific purposes to information technology students.

The roots of differentiated instruction

The concept of differentiated instruction is based on the ideas of Confucius about the importance of personal development for the sake of the ultimate goal of serving the state (Tung, 2001); Rousseau, who stated that the teacher should promote learners' self-fulfillment and full realization of their potential (Elias, Merriam, 2005, p. 114); Dewey (1964, p. 172, 177), who thought that education should begin with the research of the individual characteristics of a learner, his/her interests, habits, and should be regarded as constant improving of stu-

dent's skills; Bloom (1964), who supposed that learning should become differentiated in order to satisfy the learning needs of individuals; Knowles (1990, p. 58; 1975; 1986), who made a major contribution into the theoretical substantiation of differentiated learning through the development of self-directed learning process, learning contracts, principles of adult learning.

The development of cognitive psychology in 1950s served the background of the first scientific works on differentiation instruction based on cognitive styles which appeared and gained popularity in 1970s–1980s. J. Held, for example, who taught technical writing to university students and studied the influence of cognitive/learning styles (Sensing, Intuition, Extraverted-Sensing, Extraverted-Intuition, Perception, Judging) on the learning outcomes came to the conclusion that students with the Perception Style produced more “average” or “poor” papers and fewer “good” papers than those with the Judging Style (Held, 1983, p. 87).

At present the use of differentiated instruction of foreign language for specific purposes at university level is associated with the extensive use of different cognitive/learning styles in teaching the four essential language skills: listening, speaking, reading, writing. To organize the teaching-learning process of the first-year university students of different language proficiency levels Surkova suggests using an introductory course which includes tasks based on learners' preferred cognitive styles (extrovert/introvert, field-dependent/field-independent, narrow/wide range of categories, reflective/impulsive, auditory/visual, analytical/holistic). Differentiated instruction is based on the learner-centered approach with the focus on his/her psychological characteristics, the language proficiency level, the interactivity, the prevailing role of independent learning and mobility through periodic testing of students' language skills that allows forming mobile groups for work on a particular learning task (Surkova, 2004, p. 12).

Balteiro states that teaching large heterogeneous (mixed-ability) English for specific purposes university groups in Spanish University involves a number of difficulties in teaching process. Among them the educator mentions: identifying the group characteristics; defining the learner needs; outlining the practical ideas for realization them in mixed-ability groups. The effective solution of the issue is in: 1) varying topics and contents, 2) setting open-ended tasks so that students can complete them according to their own levels, 3) providing activities with varying degrees of difficulty, 4) using pair and group work, 5) grouping them according to their levels, 6) attending to particular individual difficulties (and advanced students), 7) providing additional material to those who may need it (Balteiro, 2007, p. 4–7).

Selverova (2010), using the learning style classification by Honey and Mumford (activist, reflector, theorist, pragmatist) and applying the dominant perception channel (auditory, visual and kinesthetic), divided students into

groups for teaching speaking skills: theorist-auditory, theorist-visual and theorist-kinesthetic; pragmatist-auditory, pragmatist-visual, pragmatist-kinesthetic; activist-auditory, activist-visual, activist-kinesthetic; reflector-auditory, reflector-visual, reflector-kinesthetic. Due to combination of the learning styles it is possible to select the effective teaching techniques that take into account the students' individual preferences and increase their motivation.

The analysis of scientific literature shows that at present scientists and educators came to have a clear understanding of differentiation as an important factor of the effective organization of the teaching-learning process which was focused on the learner with his or her individual potential, language proficiency level, learning needs and self-directed learning ability, preferred style of learning.

Factors contributing to successful use of differentiated instruction in teaching foreign language for specific purposes to university students

In context of our study we are especially interested in the analysis of factors of successful English language learning at technical universities made by Dovhalevskaya. Among such factors she identified: students' general academic performance, linguistic performance, adaptation ability, general intellectual development, verbal intelligence, motivation. She came to conclusion that these factors influence the rate and consequently the result of the students' foreign language learning (Dovhalevskaya, 1974).

Obraztsova continued the study and suggested such factors as: the professional and learning motivation, the level of general skills formation, the outcome level of language learning, the level of general intelligence and special linguistic abilities, educational and cognitive activity. Among differentiated techniques and methods of foreign language teaching the scientist suggests problem solving activities, creative tasks, differentiation of volume and difficulty level of educational material, encouraging the students to determine their own strengths and weaknesses (Obraztsova, 1979).

Teaching English speaking skills to the first-year students at technical universities Schoseva (1991) also outlined the factors contributing to successful use of differentiated instruction such as the outcome level of language and linguistic abilities. Taking into account the student diversity, she proposes to vary educational materials (the degree of difficulty level, instructions of the task, content of the task).

According to Baklazhenko the efficiency of teaching writing and reading skills at technical universities depends on the motivation of students, the level of their competences in reading and writing, their preferences in learning styles (analytical, verbal and practical-activity). She concludes that students achieve better results if at the initial stage they perform tasks that correspond to their language level and preferred learning style and only at the following stage have free choice of tasks to perform (Baklazhenko, 2016).

Among the factors of successful English language teaching scientists explore tiered instruction. To organize the work in classes with students of different language proficiency levels, they propose to divide students into groups according to their language proficiency levels, take into consideration the degree of their academic autonomy, apply various forms of control. For instance, Kobtseva uses the model of mixed differentiation, which involves division of students into homogeneous groups of the same level of language proficiency to study one or several other disciplines. She also takes into account the degree of foreign language skills development and motivational sphere of students. Kobtseva (2007) states that at the end of the academic year students may be moved to higher or lower level groups depending on their performance.

Teaching English listening skills, Shchukina (2009) thinks that one of the most important factors contributing to successful use of differentiated instruction in teaching foreign language for specific purposes to university students is the degree of learning autonomy (the limited autonomy, the minimum required autonomy, the sufficient autonomy).

The analysis of scientific and methodological literature proves the efficiency of differentiated instruction of foreign language for specific purposes at university. Much attention is focused on the importance of taking into consideration of factors contributing to successful foreign language teaching including the degree of foreign language abilities development and motivational sphere of students, intellectual potential, personality traits, cognitive and learning styles, strategies, independent work, interpersonal relations.

Summarizing and adapting the experience of educators, we define the factors contributing to successful use of differentiated instruction in teaching English for specific purposes to information technology students:

- the level of foreign language competence in listening, speaking, reading and writing;
- the level of verbal and nonverbal intelligence;
- motivation;
- preference in cognitive and learning styles and use of learning strategies;
- use pair and group work;
- the level of learning autonomy;
- use of different forms of control;
- use of information and communication technologies.

Conclusion

The results of our research give ground to conclude that since the middle of the twentieth century differentiated instruction has been used as an important means of optimization of the teaching-learning process. Thus at present, scientists differentiate students according to the language proficiency level, the ability to learn foreign languages, cognitive and learning styles. They also take into con-

sideration such factors of success of foreign language training as: students' motivation for learning, general academic success, level of general skills development, level of language learning outcome, adaptation, general intellectual development, verbal intelligence, level of special linguistic abilities. To optimize the learning process problem-solving tasks and creative tasks, educational materials of different volume, level of difficulty and content, varying instructional groups, learning strategies, various forms of control are used.

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