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Tytuł rozprawy: Autonomization Process of English Specialized Medical Language Lexis Acquistition at the Higher Education Level

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Summary

Introduction:

Specialized languages are of great significance in the development of human civilization, being its product and, at the same time, a tool of progress. They are divided into languages related to the functional performance of some activities and those related to performing activities of a cognitive nature. Understood in this way, specialized languages influence the development of civilization by constantly deepening and improving the knowledge that already exists. Being a tool for creating new knowledge, they also play a significant role in optimizing the technical, economic, and cultural development of man and the world. The relationship between the civilization progress and the specialized languages' development is reflected in the specialization level of the societies that use them.

A unified way of specialized vocabulary use does not negate the importance of a narrowly defined terminology, which is considered the most important constitutive feature of any specialized language. It is the element that distinguishes a specialized language from a general language, and it differentiates individual specialized languages from each other. The knowledge and ability to use specialized terms determine the performance of communication occurring between a certain discipline representatives and its cognitive efficiency. Lexical terms also enable systematic scientific description and analysis of reality while playing the role of human cognitive work instruments and tools supporting practical work. Specialized terminology education is an essential element in the lexical competence of medical students.

Aim of the study:

Addressing the issue of specialized medical language at the higher education level aims to develop a method of professional lexis acquisition embedded in a specialized communicative context while maintaining the principles of an autonomous approach to the teaching and learning process. A homogenous language acquisition process by all learners is unjustified, as it does not consider the individual development of each learner whose activity is also subject to diverse external factors. An autonomous approach to foreign language acquisition and didactics promotes diversity and influences individuals' self-actualization by stimulating independence in the learning process. The development of psychosocial and neurophysiological sciences and understanding the mechanisms responsible for learning, memorizing, and concentration processes have set a new direction in medicine teaching. The learning process is now understood as a conscious engagement of learners to acquire knowledge and skills through interaction with the surrounding environment. In addition to knowledge, students' practical skills and interpersonal competencies have therefore become critical. The second reason for the changes in medical education has been the technological and information development, which has enabled the introduction of modern equipment, as well as diagnostic and therapeutic methods into medical teaching, which also has a direct impact on increasing patient safety and improving health care. Thanks to them, the teaching model has changed, and along with greater access to knowledge, it now introduces modern technology and virtual reality to medical education. The effectiveness of the teaching process, consistent with the principles of heutagogy and facilitating autonomy, therefore requires the practical application of knowledge learned in the lecture hall. Such an approach is consistent with the principles of contextual language teaching and learning. In the present study, this context has been accomplished by the medical simulation, where students practiced and reviewed professional lexis in conditions reflecting real situations, places, roles, and problems related to their future professional work.

The objectives of the study were 1) to determine the correlation of modern technologies used in teaching and the practical application of English specialized medical vocabulary and their impact on the learning autonomy, 2) to verify the effectiveness of the learning process autonomy on the degree of mastery of the English lexis of specialized medical language.

Methods:

A pedagogical experiment was adopted as the primary method of empirical hypothesis verification. It was conducted with the comparison group technique to explore causal

relationships between two variables subjected to deliberate and controlled manipulation. The experimental factor was the use of modern IT technologies and high-fidelity medical simulation. The study involved 212 respondents. Selection into groups was made in a randomized manner. Two research techniques were used to conduct the first stage of the empirical study: a survey and evaluation test. The practical part of the study was carried out in a high-fidelity medical simulation environment.

Results and conclusions:

Calculations were performed using IBM SPSS software. The results of the study collected from a multiple-choice questionnaire were presented as absolute numbers and percentages. During the analyses of the study results, both frequency statistics and non-parametric Pearson's Chi-square test for independent groups (for non-measurable characteristics) were used to determine the correlation between variables. The limit of statistical significance was $p < 0.05$.

The obtained results of the first part of the study clearly indicate the predominance of the traditional methods use, in particular, expository methods and explicit teaching, and the low degree of the didactic process autonomy. In the second stage, it was shown that the use of modern technology significantly affects the individualization of learning, so the use of various forms and IT tools significantly contributes to the effective acquisition of English-language specialized lexis. The research in the empirical part also confirmed the trend of a high level of interest in modern applications in the studied population of students. At the same time, it should be noted that the teachers were not viewed as inspiring mentors aware of the autonomous approach to self-education. They were rather perceived as limiting themselves in the didactic process, usually to a schematic and explicit transfer of subject knowledge. However, of significance is the willingness and readiness of the studied population to make efforts to support their learning habits with technological progress. Thus, it would be necessary to introduce some interventions among teachers to support their ability to the autonomous use of modern IT tools, which would induce independent and individual exploration aimed at the creative design of their own ways to strengthen the acquisition, consolidation, and memorization of new subject content by their students. The obtained results also show that both the knowledge and use of modern applications in autonomous consolidation and memorization of new material is gender related. The stereotype of perceiving men as more willing to use modern technologies in their own time has not been confirmed. Therefore, it seems necessary to intensify teaching activities leading to greater

motivation among men to support them in autonomous use of IT tools. Such approach effectiveness has been unambiguously confirmed in the presented research aimed at the effectiveness of specialized medical language teaching autonomy. Such results allow putting forward a thesis that the didactic process at the level of consolidation of lexical material requires both verification and adjustment to the needs and preferences of the recipients of the modern didactic process.

Finally, it should be noted the great applicative potential of the research undertaken in this study. It can be assumed that the course of consolidation of lexical material chosen in the experimental group, i.e. the use of modern technologies and situational learning, can be successfully applied to the autonomization of the teaching process also at other fields of study, not only at medical universities. Not everywhere it is possible to reproduce so precisely the conditions in which students' professional work will take place in the future. Situational teaching will have to take a form adapted to the nature of studies and the capabilities of individual universities. Nevertheless, specialist terminology may be combined with strictly professional training during various practical subjects not only at technical or IT universities, but also at art schools and faculties related to physical education, business or banking. Contextual teaching can also be successfully used in various social sciences and humanities, especially philology. However, the biggest obstacle in this type of activities may be the lack of cooperation between teachers and lecturers of the subjects. The experiment presented in this paper could be enriched with an example of enhancing teaching autonomy by combining classes with medical simulations, thanks to the favor of the cooperation, which goes far beyond standard educational solutions, requires autonomy not only from students, but above all from lecturers and research and teaching staff, who recognize the needs of learners and adapt original, often unique ways of working to them. However, regardless of the technical background and the commitment of instructors to situational learning, at any university and at any field of study modern technologies can be used to master specialized vocabulary, including various types of applications, the effectiveness of which has been clearly proven in this work.

