

Originality. *The importance of mastering higher mathematics by the cadets for solving professional tasks of the engineering character in the history of the formation and development of training institutions for future fire and civil safety specialists is demonstrated.*

Conclusion. *The process of studying higher mathematics is complicated by the lack of scientific and methodological developments on the solution of professionally oriented tasks, which sets the vector of further scientific research of the author.*

Key words: *fire safety; civil safety; engineering training; mathematical component of the training; history of the training of life safety specialists; fire safety technical school; higher mathematics; mathematical modeling.*

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GENDER-SPECIFIC METHOD OF TEACHING A FOREIGN LANGUAGE AT HIGHER EDUCATIONAL ESTABLISHMENTS

Анотація. *Розглянуто проблему врахування гендерних особливостей особистості у процесі вивчення іноземної мови студентами закладів вищої освіти. Аргументовано доцільність запровадження гендерно зорієнтованого підходу до навчання іноземної мови у групах, що розділені за статтю. З'ясовано, що серед студентів гендерно диференційованих груп обсяг і рівень якості засвоєння навчального матеріалу вище порівняно з результатами отриманими студентами гендерно змішаних груп. Увагу зосереджено на врахуванні гендерних характеристик викладача закладу вищої освіти, що вможливитиме зростання рівня академічних знань і практичних навичок студентів.*

Ключові слова: *стать; гендерні характеристики особистості; гендерний підхід; гендерно-специфічний метод навчання; заклади вищої освіти; освітній процес; навчання іноземної мови; вивчення іноземної мови.*

Introduction. At the beginning of the new century there is a deep need to rethink the concept of education and upbringing, as contemporary education of today must become an effective mechanism that enables people to independently plan their lives according to the principles of active citizenship. The multifaceted human activity, thinking, and behavior are gender-based, that is gender-specific. Considering this, a comprehensive study of gender issues in the field of education is particularly important and relevant. The introduction of the gender component into education and gender-based methods into the educational process will enable the transformation of gender roles and relationships that will increase gender equality and enable the achievement of positive results in the life of Ukrainian society. In modern realms, higher education institutions are forced to prepare graduates to live in conditions of rapid changes, to help adapt to them, thus providing a proper niche on the market of educational services.

Analysis of recent researches and publications. In numerous works of Ukrainian and foreign scientists a large amount of knowledge on the educational issues of gender is

accumulated. Methodological problems of gender pedagogy were studied by V. Kravets, L. Shtylova; the issue of gender competence of a teacher by T. Doronina, I. Zagainov; introduction of the gender approach to the education of student youth and their professional training by T. Golovanova, I. Muntyan, O. Tsokur; interaction of teachers with boys and girls of adolescence by O. Antipova; gender stereotypes of behavior of boys and girls by S. Vykhor, L. Kobylyanska. Gender approaches to education are researched in studies of O. Kamenskaya, O. Konstantinova, T. Ovchinnikova, S. Rozhkova, N. Tatarintsev. Gender aspects of education and upbringing have been analyzed in the studios of such researchers as T. Golovanova, I. Zvereva, O. Kiz, O. Kikinezhdi, V. Kravets, N. Kutova, G. Laktionova, O. Petrenko. Despite the large number of scientific studies devoted to the gender perspective in education, and the existence of the shaped theoretical framework concerning gender and the development of higher education, a number of relevant aspects of studying the methodology of teaching a foreign language to students of higher educational institutions of Ukraine from the standpoint of a gender perspective requires a more detailed interpretation.

The purpose of the article is to characterize the methodology of teaching a foreign language through the prism of gender characteristics of a student personality in higher educational institutions of Ukraine.

Presentation of main material. The gender-oriented approach to the educational process is aimed at the comprehensive consideration of the peculiarities of creating an educational environment. This involves the correction of the curriculum, the inclusion of an individual component, selective subjects namely, disciplined attendance of classes. Obvious differences in cognitive activity, motivation for learning, and behavior are known to be present between the opposite sexes. These differences must necessarily be taken into account in the educational process of higher educational establishments, in the process of teaching a foreign language in particular.

The maturation of mental functions of boys and girls differs greatly. Girls, as a rule, start to speak earlier, all subsequent development takes place on the background of speaking activity, and as for boys, and all these characteristics are mostly based on the visual-image level. Girls surpass boys in verbal abilities; their speech is more correct and more complicated. For them it is easier to perform tasks that require the usage of verbal counterparts, their language is faster, they better understand the written text. Despite this, boys are more likely to find verbal associations, solve crossword puzzles, which prove the strong side of men precisely the ability to search a new non-standard solution, to innovation [1].

V. Kagan's research proves that girls' perception is more detailed, hence greater attention is paid to external ordering, their thinking process is more concrete and pragmatic, focusing not so much on revealing patterns as on obtaining the desired result. These differences lead to a number of important consequences. Women have more accuracy in work, but less integrity, general view of the subject; men are characterized by the early developed ability to separate essential information from the secondary one. The male's mind is more inclined to generalization, but often less specific. Men are more inclined to violation and to solve global problems and, at the same time, freely to operate by isolated from one another facts, approaches and theories, whereas women belong to the «developers» of the tasks which are already formulated, they study and process these tasks often more perfectly and better than men [2].

In the work of a group of American researchers led by E. McCoby, which contains the conclusions out of 50 studies on the problem of gender differences in the process of thinking, it is noted that the women style of thinking is more schematized. At the same time, men are more aware of the diversity of responses to the implementation of intellectual tasks. We believe the reason for this is that the search for the result by men is less affected by «equal learning», where the approaches to teaching boys and girls are the same. This is evidenced by the analysis of knowledge achievements of male and female students. Higher school score of

girls, as the study proves, are explained by the ease of learning the information by heart and information reproduction using the way of perception and evaluation. The similar situation occurs in high school as well. T. Bendas argues that the excluding due to the lack of knowledge progress among male students is much bigger than among female ones. The reason is the principles of teaching in a modern high school, based mainly on the reproduction of ready-made schemes of memorizing the material and not on creative approach and activity. On the other hand, girls are characterized by diligence, honesty, responsibility for their work and results. Speaking about male students, they possess weakened forms of these qualities, as well as their interest in learning is mostly not so strong, and often impossible to be stimulated with any creative approach or a task [3].

Having analyzed numerous independent studies devoted to the problem discussed, D. Halpern came to the conclusion that women on average achieve higher results in tasks requiring the quick selecting and use of phonological and semantic information stored in long-term memory; comparing and understanding of complex prose texts; accurate motor skills; high speed of perception; decoding of non-verbal forms of communication [4].

On average, men get higher results in tasks that require activities in the visual-spatial memory, need motor skills related to getting into the target, and logical thinking [5]. Moreover, men are predominant among the most gifted people, and among those suffering from mental retardation, attention disorders, disturbance and delayed development of speech. The number of men at both ends of the normal distribution curve, built on the results of measuring the coefficients of intelligence, significantly exceeds the number of women, that is, the exceptional giftedness as well as reduced rates occurs among men more often.

The problem of gender differences, as the study proves, is closely related to the verbal (speech) behavior that affects learning outcomes. D. Weiber argues that individuals who mature earlier, have better verbal qualities than spatial ones; they are characterized by a less literary language [6]. Numerous aspects of the interaction of speech and thinking (consciousness) have always been in the center of studying of various sciences such as philosophy, psychology, linguistics and a number of others. The complexity and factual ratio of speech, thinking and consciousness are interrelated. The ability of a person to study is combined with the development of thinking and consciousness, to a large extent the mentioned ability depends directly on how well a person's ability to use the language.

Gender differences between boys and girls are predefined by a number of factors: biological, physiological, neuropsychological, social and psycho-pedagogical. By organizing the educational process based on the gender approach and introducing a gender approach to the education of boys and girls in higher educational institutions, it is especially important to take into account the psychological, neuropsychological characteristics of students of different sex and their cognitive indicators. The system of education is a powerful means by which society generates gender and social relationships. Studying in higher education institution dictates students certain norms and rules of behavior, helps learn and adopt the characteristic features of boys and girls. During the studies at a university or an institute, the student continues to master the stereotypes of behavior and speech.

I. Kon considers the communication of girls to be more passive, but at the same time more friendly and selective. According to psychological studies, boys first establish contact with each other, and only later, during a game or business interaction, they have a positive attitude and spiritual attraction to each other. Girls, conversely, communicate mainly with those who like them, the content of social activities for them is relatively minor [7].

Modern pedagogical science and practice do not always take into account gender as an important characteristic of a student. Thus, classes, as a rule, are not shaped for boys, on the peculiarities of their physiological and psychological functions. Specialists argue that the time needed for involving into a class (the period of inclusion into the learning process) depends

on the gender of a student. Girls, as a rule, after the beginning of a lesson, quickly gain the optimal speed of learning ability, but for boys, the period of inclusion into the learning process lasts longer [1]. A teacher makes a conclusion about the degree of attention observing the eyes turned to him or her, but for boys it is not typical to look at a teacher. Thus, when planning a lesson in the way when the most difficult part of the material is at the peak of efficiency, the teacher does not take into account the level of inclusion of boys into this lesson. Unequal characteristics of boys' and girls' cognitive activity are related to the peculiarity of thinking, perception, memory, interests, and the nature of their physical activity.

So, girls and boys develop differently. The task of the educational process based on the gender approach is to maximize the full potential of both boys and girls so that each of them can succeed in the future. This thesis should be taken into account when teaching disciplines both humanities and mathematics and natural sciences.

Taking into consideration the peculiarities of the cognitive processes of boys and girls, we note that young people of male gender are constantly searching for a non-standard solution of a problem, initiating new ideas; they are focused mainly on the outcome, not on the process. The harder the task, the more interesting it is to be performed. These characteristics are needed to be taken into account by a teacher while teaching a foreign language at higher educational establishments. A male student has an interest only if the result of his activity is successful. If he does not succeed and the teacher does not support him, then there will be no interest in the performing of the task. This is due to the need for self-affirmation, which is genetically coded in each male representative [8].

Comparing with boys, girls are directly focused on the learning process. They are consistent in the logical steps for performing a task; clearly adhere to the algorithms in the execution of tasks, and in their composing. By comparing, pondering, analyzing, solving problematic situations created by a teacher, female students work carefully and accurately.

A teacher in the same-sex groups, taking into account the peculiarities of mental development, outlines goals and objectives of the students, and plans how to present the educational material just in this very group [9].

According to the recommendations developed, in female groups foreign language classes should be structured by dividing the themes into blocks. It is advisable to raise problematic issues paying attention to the main points, helping to find the truth. The above principle is implemented through a system of repetitions. For the development of creative potential, girls should be more actively involved in solving problem situations through an independent formulation of issues, paying attention to the grammatically correct construction of sentences. It is important for a tutor to teach female students to advocate and prove their point in a foreign language.

Emotionality, facial expressions, teacher's gesticulation, use of visibility, illustrations, and images correspond to psychological peculiarities of the female sex. Femininity, mutual understanding, compassion, ethics of relations with the opposite sex is taught on classes of a foreign language in female groups.

Men are researchers by nature, so the method of micro-discovers in classrooms is an important guarantee of success for them. Guys are better at perceiving information in writing. Visibilities like circuits and tables can widely be used on lessons. New material, especially on senior courses, is better to be taught in large blocks (tense groups, for example), using the reviewing the content; this corresponds to the abstract-logical thinking of the boys. On lessons great attention should be paid to various types of an independent work. Preparing the homework for fixing the material taught, it is important to be particularly serious offering crossword puzzles, rebuses, tables, spider graphs and other non-standard tasks [10].

By organizing pedagogical activities, providing a high school of a new type with competent teachers, one should be guided by the professional skills of a teacher, by his or her

personal qualities, gender dominants. Under the gender dominant we understand the predominance of feminine or masculine qualities in a particular person. So, in male groups are better to be taught by male teachers, because they do not have to raise their voice for male students hear information. A female teacher with male gender dominance can also successfully teach in boys' groups as it is easier for her to communicate with male audience. In groups of girls, it is desirable for a teacher to be imaginative, alive and emotional. By understanding the specific features of sexes, the temperament, a teacher together with boys and girls goes along the pedagogical path, contributing to the development of students, which coincides with their own personal preferences.

The development of creative abilities and self-expression proves the implementation of principles of the gender approach in the teaching method of a foreign language. It must be admitted that the modern educational system lacks a creative approach. It can be explained by the tight boundaries of a curriculum. Unfortunately, creative activity is not a criterion for learning, it is more important for a teacher to know whether the material is learnt, and not to have information about the presence of several views on the tasks or problems that are being analyzed. The comfortable conditions created in the same-sex groups, the lack of psychological barriers that reduce intellectual, cognitive activity, open the students' creative abilities, their ability to be themselves, which is especially important for boys who react sharply to any changes.

By enhancing the effectiveness of the educational process on the basis of the gender approach, the teacher must remember that each male student or a female student is an individuality and personality. The maximum result can only be achieved if the two-way communication between a teacher and a student in a subject-subjective, dialogic and effective-creative relationship aimed at supporting the individual development of a student, giving the necessary space of freedom to make independent decisions with an emphasis on positive personality traits. When choosing the content and form of teaching in gender-specific groups, it is important to outline optimistic perspectives in working with students. Knowledge of the most important differences between boys and girls in behavior, communication and interpersonal perception optimizes the adequate understanding of the students' actions, differentiates the expectations and requirements of the teacher towards students of different sex, and directs educational actions to the appropriate course. At the same time, it must be taken into consideration that not all students can be clearly identified as «male» and «female», sometimes boys impose behavioral stereotypes more characteristic of girls and vice versa.

Conclusions. The study describes the possibility and expediency of using gender differences among students of different sex in teaching a foreign language in higher educational institutions on the basis of the gender approach, which includes factors, conditions, methods of an educational process, psychological, neuropsychological features and cognitive indices of students of different sexes and their accounting in the educational process. The result of the work is the creation of a gender-friendly educational environment, which is made through the methodical influence of the educational process on the student as a person in general, on a young man and on a girl as a subject of education in particular. This approach will increase the level of students' knowledge of a foreign language, personal achievements, will form readiness for life, future professional activity, and will help to establish harmonious relations between the sexes through the awareness of their femininity or masculinity.

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Abstract. KOVAL Svitlana Mykolaivna. *Gender-specific method of teaching a foreign language at higher educational establishments.*

Introduction. The article deals with the problem of gender-specific method implementation into the process of learning a foreign language in a higher educational establishment. A comprehensive study of gender issues in the field of education is particularly important and relevant. Despite the large number of scientific studies devoted to the gender perspective in education, and the existence of the shaped theoretical framework concerning gender and the development of higher education, a number of relevant aspects of studying the methodology of teaching a foreign language to students of higher educational institutions of Ukraine from the standpoint of a gender perspective requires a more detailed interpretation.

The **purpose** of the article is to characterize the methodology of teaching a foreign language through the prism of gender characteristics of a student personality in higher educational institutions of Ukraine.

Results. By organizing the educational process based on the gender approach and introducing a gender approach to the education of boys and girls in higher educational institutions, it is especially important to take into account the psychological, neuropsychological characteristics of students of different sex and their cognitive indicators. Providing a high school of a new type with competent teachers, one should be guided by the professional skills of a teacher, by his or her personal qualities, gender dominants.

Originality. Obvious differences in cognitive activity, motivation for learning, and behavior are known to be present between the opposite sex. Men are researchers by nature, so the method of micro-discovers in classrooms is an important guarantee of success for them. In female groups foreign language classes should be structured by dividing themes into blocks. It is important for a tutor to teach female students to advocate and prove their point in a foreign language.

Conclusion. *Modern pedagogical science and practice do not always take into account gender as an important characteristic of a student. The task of the educational process based on the gender approach is to maximize the full potential of both boys and girls so that each of them can succeed in the future. The result of the work is the creation of a gender-friendly educational environment, which is made through the methodical influence of the educational process on the student as a person in general, on a young man and on a girl as a subject of education in particular.*

Key words: *gender; gender characteristics of a person; gender approach; gender-specific method of teaching; higher educational establishments; learning process; teaching a foreign language; learning a foreign language.*

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ОСОБЛИВОСТІ МОДЕЛЮВАННЯ ПРОФОРІЄНТАЦІЙНОЇ РОБОТИ В ЗАКЛАДАХ ЗАГАЛЬНОЇ СЕРЕДНЬОЇ ОСВІТИ РЕГІОНУ

Розроблено теоретико-управлінські підходи до процесу моделювання щодо профорієнтаційної роботи в закладах загальної середньої освіти регіону на засадах підвищення ефективності профільного навчання та забезпечення професійного самовизначення.

Ключові слова: *модель; моделювання; проектування; профорієнтаційна робота; проектний підхід; діяльнісний підхід; системний підхід; синергетичний підхід.*

Постановка проблеми. Важливим завданням системи професійної орієнтації в межах загальноосвітньої школи є формування в учнів умінь обирати сферу професійної діяльності, що оптимально відповідає запиту регіональних ринків праці. У процесі дослідження можна констатувати, що профільне навчання ще недостатньо впливає належною мірою на профорієнтацію учнів закладів загальної середньої освіти, тому зміст і організація навчання у старшій профільній школі потребують радикальної модернізації. Глибинною причиною такої ситуації є відсутність обґрунтованих організаційно-педагогічних умов цієї діяльності, що відповідно актуалізує розроблення моделей управління, які є потужним механізмом у досягненні нової якості профільної освіти в загальних середніх закладах.

Аналіз останніх досліджень і публікацій. Механізми розвитку і функціонування закладу загальної середньої освіти з забезпечення належного рівня профільної освіти визначені в низці документів, зокрема, у Законі України «Про освіту» (2017) [1]. Провідним теоретичним положенням розвитку регіональної освіти, стала постанова Кабінету Міністрів України від 27 серпня 2010 р. «Про освітній округ» [2], що врегульовує питання створення й функціонування освітніх округів як організації освітнього простору.

Педагогічне дослідження теоретико-прикладних аспектів управління профорієнтаційною роботою в закладах освіти регіону і доцільність відповідних