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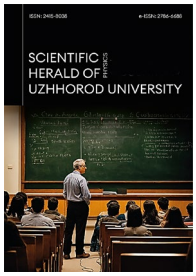

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Theoretical and methodological foundations of humanisation education in universities (on the example of teaching chemistry)

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Abstract

Relevance. The relevance of the study lies in the fact that education cannot be limited only to mastering knowledge and professional skills in the chosen field and narrow specialisation. The existing foundations of graduate training aimed at deepening practice in one professional field are not enough. In such conditions, education should ensure that the students receive knowledge and skills that will give them a sense of satisfaction with learning.

Purpose. The purpose of the study is to consider the theoretical and methodological foundations of humanisation education in higher educational institutions on the example of teaching chemistry.

Methodology. The methodological framework encompassed several approaches to exploring this subject, including didactic, humanistic, general pedagogical, and pedagogical experiment methodologies.

Results. The study on the theoretical and methodological foundations of humanisation education in universities, focusing on teaching chemistry, identified key outcomes. Firstly, the adoption of student-centric teaching methods, facilitated by the transition of teachers into organisers of the educational process, has enhanced student engagement and independent learning. Secondly, the expansion of educational content to include interdisciplinary perspectives alongside specialised subjects has provided students with a more comprehensive understanding of chemistry in real-world contexts. Lastly, the shift in attitudes and relationships between faculty and students has fostered a more supportive and collaborative learning environment.

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Conclusions. In conclusion, the findings underscore the importance of humanisation in higher education, particularly in the field of teaching chemistry. By prioritising student engagement, interdisciplinary learning, and supportive relationships, universities can create a more enriching educational experience. However, the implementation of humanisation strategies may encounter challenges, including the need for faculty adaptation and resource allocation. Nevertheless, the practical significance of these strategies in enhancing the quality of education in universities cannot be overstated, highlighting the importance of their effective implementation and continued exploration.

Keywords: humanisation; universities; theoretical and methodological foundations; teaching chemistry; students; educational technologies.

Introduction

The reality surrounding the student in modern time is a world of constant changes dictated by the development of civilisation, globalisation, and scientific and technological progress. In this innovative world, there is a growing demand for flexible and rapid adaptation to the needs of the labour market, new professions, and modern technologies.

The pace of progress in all areas of a student's life forces them to supplement skills and acquire new knowledge. The prerequisite justifying continuous human education is also the possibility of satisfying one's own aspirations and needs, and the implementation of passions and interests [1].

The process of academic education, implemented within the framework of professional education at the highest level, can be considered on the example of the relationship between education and professional socialisation. This relationship combines influences related to the development of a student and support them in achieving complete harmony and a mature personality. This occurs in relation to themself, the world, and society within the framework of the concept of humanisation. Education, in this context, is understood as a phenomenon consisting of relevant processes, characterised by a choice of content, objects, goals, and educational effects.

It is very important that in times of "incessant reforms", in times of pedagogical experiments conducted without full awareness of their scientific foundations and practical results, do not forget about the most important thing – about the student's personality, their individuality and good manners [2; 3].

Education is the broadest category, covering all the detailed processes of development and upbringing that affect the personality change of individual students and human groups. The humanisation basis of learning is an indicator when planning academic processes towards more complex, systemic, comprehensive, and integral aspects. The changes that have already taken place in education in recent years are associated with profound political, social, and economic changes.

This fact is widely recognised among teachers because education should be closely linked to the changes currently taking place in the state. The most important tasks of the modern theoretical and methodological basis of humanistic education include: creative development of students in the era of "education for all"; strengthening of axiological approaches – education should be carried out in the spirit of trust, dialogue, fraternity, awakening the noblest in students. But, at the same time, reasonable concerns are caused by the direction of these changes, which do not always meet expectations or even negative consequences for humanisation practice [4]. Thus, the problem remains open, and it is necessary to consider the place and conditions for good and appropriate development of education, the humanisation of which is one of the most important goals.

The term humanisation implies the transformation of the process and conditions of life, work, and learning in such a way that they comprehensively meet the needs of the students and serve the development of their personality. Humanism shows a world built by people for people, a world of their autonomous achievements and intellectual work, created with agitation, criticism, and hope, considering the personal and common interests of teachers, which include in this world all the richness of human thinking in many ways, exploring the harmony of the world and the meaning of existence, which are focused on the effectiveness of actions [5].

The main prerequisites of humanistic pedagogy include the comprehensive development of the human personality, emphasizing the unity of all spheres of its development. Another essential aspect is the individualistic and personal orientation, with a focus on the subjectivity of the teacher, demonstrated through their ability and willingness to independently understand pedagogical processes.

Additionally, the value and psychological style of work are crucial, characterized by insight and kindness towards each student, and the implementation of the principle of subjectivity in pedagogical work, taking into account the meaning of life, needs, and interests of both teachers and students. Furthermore, a functional approach to problem-solving and a culturology of development processes are emphasized, which entails learning the patterns of individual student development and considering the moral foundations of universal values and national culture based on universal and global norms [6; 7].

The purpose of the study is to consider the theoretical and methodological foundations of humanisation education in higher educational institutions on the example of teaching chemistry.

Materials and Methods

The methodological basis consisted of the following approaches to the investigation of this topic: didactic, humanistic, general pedagogical, pedagogical experiment. The didactic method is aimed at transferring, expanding, or transforming knowledge, enriching with new information, and in some cases, confirming own knowledge and exchanging opinions.

Its activation methods are aimed at developing various types of skills, conducting analysis, observing oneself and other students from the standpoint of the implementation of theoretical and methodological humanisation foundations at the university. It facilitates the transfer of knowledge in an interesting way, teaches creative problem

solving, arouses the interest of students and allows them to gain new experience, including interpersonal.

Emotional involvement of students is important for the learning process, it allows them to be interested in this subject and understand its advantages. The choice of a didactic approach is influenced by many factors, most of which are objective and subjective, these are: the purpose and subject of training, skills, experience, character, group size, circumstances and reasons for organising humanisation training, and organisational conditions, for example, technical equipment.

A humanistic approach to education involves the creation of effective learning, vital knowledge and skills based on a predetermined goal. As a result, a sharp division is formed and maintained between the teacher, the omniscient subject of learning, and the subordinate student. Such relationships, although they bring a positive effect to a certain extent, but they suppress the independence of thinking and the will to create on a broader scale, which only strengthens obedience and repeated creativity.

The goals of activity with this approach to education can be determined by the following strategies: the strategy of the "resource of virtues", that is, the implementation of a certain plan, the desire to achieve an ideal, desired state, predetermined as the best and tested in action; the strategy of "industrial psychology", striving to implement actions that allow perceiving this problem. Thus, they are used to form and consolidate skills and relationships. With a humanistic approach, each student is assigned basic attributes, that is, freedom and responsibility, the ability to choose and the ability to overcome external constraints. Human interaction is also important, with the resulting advantages and limitations.

The general pedagogical paradigm implies the existential roots of humanistic thinking about the student as a person more or less responsible for their behaviour. This implies respect for the freedom of choice of the student and the denial of actions that do not meet their needs. With this approach, the teacher's influence on students only encourages them to know themselves and choose goals that meet their needs.

Forcing or imposing something incompatible with their needs, adopted at the initial stage, will work against the educational system and will lead to failures resulting from actions incompatible with their needs, or to rebellion and rejection of these actions. Teachers can only accompany the student in experiencing themself and create situations that will allow them to independently meet basic needs, and learn and develop skills of a higher order – opportunities for professional growth. This activity, which contributes to the implementation of potential abilities in accordance with individual goals, includes the creation of situations that would allow studying and deepening understanding of the mechanisms of own actions and would allow acquiring knowledge that would help students to realise and live a satisfying and interesting educational life.

Pedagogical experiment is a method of scientific research of educational reality, which consists in starting or changing the course of processes by introducing into them a new observation factor that arises as a result of influence. The main component of the experimental study is a – working hypothesis. Testing of a working hypothesis begins with the definition of independent and dependent variables. The next stage of the experiment is the selection of equivalent classes, which will differ slightly in the number of students, mental and social level.

An important component of the experiment is the initial study to measure all dependent variables. Experimental factors are called independent variables and ongoing changes. The pedagogical experiment was conducted in 2017-2018, 2018-2019, and 2019-2020 academic years when teaching inorganic chemistry to first-year students of the Abai Kazakh National Pedagogical University, K. Zhubanov Aktobe Regional University, Korkyt Ata Kyzylorda University. 324 students and 3 teachers took part in the experiment.

Results

Higher education institutions, along with a family home and a group of peers, are one of the most influential educational environments. The method of implementing the main functions of institutions related to both education and upbringing is closely related to the concept of a person and the resulting structure of values that determines pedagogical goals. In a humanising way, emphasising the student's need to realise their human potential in education, attention is paid to the significant role of education and training of the student as a whole, and not just their mind.

The main goal that the educational environment should pursue is to help form a person who is authentic in behaviour, without a mask, developing, socialised, and creative. Such a person is constantly developing and is prepared for changes in the world, accepts their own isolation and the variability of the environment and others.

The concept of learning, referred to as student-centred education, emphasizes the presence of the main regularities of the process. The desire to learn is a natural desire of every student studying chemistry, manifested in their curiosity and desire to explore the surrounding world. Meaningful learning occurs when students perceive it as relevant to their needs and goals. Learning without risk suggests that learning is best and gives the best results in a risk-free environment. Self-study indicates that training is most successful when it is initiated by the students and affects their feelings and mind [8].

This approach combines educational practice with all its elements of teaching and learning, highlighting a special emphasis on respect for the sense of freedom and self-esteem, the development of values, dignity, integrity, and uniqueness of the student in the learning process

The foundations of humanisation education in universities set goals for the development of a human personality that transforms things, explains and creates them, gives them value, that is, realises the world of personality. This is the humanitarisation meaning of human activity.

The learning process should lead to the highest stage of human development. It presupposes the entry of an individual on the path of self-education, leading to the development of two mental structures: the "current self" and the "ideal self", which contain personal patterns and ethical values that are planned and implemented.

The theoretical and methodological elements of education are consolidated by the reconstructive function,

understood as stimulating the creative forces of students and their ability to create new values. In today's changing civilisation, this function is becoming increasingly important for teaching chemistry.

A very important issue of the modern humanisation aspect is the problem of how to approach the masses and groups of student individuals so that they personally want to cooperate with all their will and energy to achieve goals. [9; 10].

The main requirement of modern education is an individual approach and knowledge of the student's characteristics. This requires a reduction in the size of groups, frequent contacts and real, not official consultations. This will undoubtedly increase the costs of the educational process. However, the most important element of the teacher's activity will be stimulating interest, forming a positive emotional attitude of the student to work on mastering a given subject and satisfaction with their own achievements.

The use of multimedia tools can expand, diversify the subject of chemistry and limit verbal forms. This requires a large amount of preparatory work and appropriate training materials. Then the subject should be divided into content that can be studied by the student – for example, computational programmes, behaviour algorithms – and content that will be presented in the form of lectures or inspired by consultations or seminars.

Under these conditions, the lecture will play the role of discussing the problem, explaining difficulties and indicating solutions. The result of these classes should be the student's attitude, which changes as the training progresses. The difficulties of adaptation that arise in the first year of training should be quickly overcome with the help of appropriate seminars, and then the psychological analysis should lead to a full awareness of the purpose of training and the creation of an active attitude that determines creative activity.

The student should appreciate the sources of information available to them and make full use of them. Although changing the attitude of staff will be a long process, it can be accelerated by organising relevant case studies and seminars. Departments engaged in professional pedagogy can play a significant role in this.

Until now, attempts at humanisation have been a middle ground between the number of hours allocated for this purpose and temporary, sometimes random elements that did not fit into a logical thematic sequence or showed mutual correlation. Individual departments were involved in the process of humanisation to varying degrees, without delving into its main provisions [11].

The purpose of the content of humanisation training is to acquire knowledge and skills that, without being directly related to professional skills in the field of chemistry, will provide broader benefits. This includes a better understanding of the role, tasks, and responsibilities associated with professional activity in society and the environment. Additionally, it aims to expand the worldview by studying areas of knowledge related to the field of education.

These tasks can be performed by a single education system consisting of many permanent and optional elements. The humanisation of technical research cannot be regarded as a private, random idea. This is already an element of training introduced in modern leading universities, which effectively participates in the training of future personnel.

Accordingly, it would be advisable to start implementing an appropriate organised theoretical and methodological system of humanisation of the educational process as soon as possible. After all, at present, the formal paradigm of knowledge is being replaced by a humanistic paradigm based on the theoretical premises of humanitarian pedagogy and humanitarian methodology, which presuppose the researcher's appeal to personal experiences, their inner state and existence.

The introduction of a theoretical and methodological system of humanisation of the educational process for students will ensure the development of the right personality of the creative engineer, who in their activities can be guided by specific principles and core values that consider important ethical, social, and environmental aspects. This will allow developing an active position in education, gaining the opportunity to evaluate your abilities, and striving for continuous professional improvement, expanding knowledge and deepening skills [12].

This will expand the knowledge base with elements of the humanities and natural sciences, expand the worldview and allow understanding the features and importance of other areas. The implementation of the proposed system is associated with numerous difficulties, the most important of which are: high operating costs of the system in the form of a small number of groups, the need to use a large number of specialists and equipment of laboratories.

It is also not easy to overcome resistance to changing attitudes and methods, especially employees with many years of teaching experience, to overcome the current passive and protective attitude of students. Therefore, it is important to indicate the advantages of humanisation, to create an appropriate organisational structure for the effective functioning of the system and an appropriate schedule for its phased implementation. Graduates of chemical specialities often do not have basic knowledge about the operation of technical devices, production systems or methods.

Therefore, the possibility of supplementing humanitarian studies with elements of technical sciences deserves detailed attention. Perhaps this would allow establishing cooperation in this area between technical and humanities universities for mutual enrichment of curricula.

The success of activities supporting the development of humanistic learning mainly depends on specific conditions. These factors were determined based on a pedagogical experiment of higher educational institutions of Almaty, Aktobe, and Kyzylorda regions, where they were accepted as the main condition for supporting activity in a humanistic approach to a chemistry student.

To effectively create conditions that stimulate development, a supportive teacher should be characterised by: empathy, warmth and care, openness and authenticity, positive attitude and respect, that is, an attitude of unconditional acceptance. In addition to the above skills, the supporting teacher must have faith in desire and self-confidence, confirmed by actions [13].

Actions that contribute to the creation of conditions that support development are associated with taking

responsibility for creating psychological comfort and stimulating actions. Such interactions are effective when a person has the following characteristics: awareness of themselves and their value system. They must also have the ability to effectively solve their own emotional problems and function effectively in their personal life.

This functioning strengthens trust in the supporting person as a competent role model. Moreover, the person should have an interest in social change and comply with ethical standards.

Additionally, successful functioning in personal life enhances trust in the supporting person, who serves as a competent role model. Furthermore, a genuine interest in humanity and social change, coupled with adherence to ethical standards, are vital components for fostering effective interactions. Only the presence of certain personal characteristics and skills allows creating conditions that support the development of a student and give concrete results both for them and for society as a whole.

At the heart of the humanitarisation of education, defined as the support of a student in personal development, the main issue necessary for further understanding of this type of thinking about education is the attitude towards students and the teacher as a person. In the process of learning chemistry, the activation of the tendency to self-renewal by creating appropriate conditions is associated with constant, never satisfied cognitive motivation.

The theoretical and methodological purpose of teaching, in addition to the transfer and consolidation of theoretical knowledge, is the development by the teacher of a full-fledged personality in the learning process, who will be able to use and develop the knowledge gained creatively and socially.

A fully functioning personality is defined as a student who is open to experiences and aware of their experiences coming from both the body and the environment. They fully experience feelings and are not afraid to show emotions. In making decisions, they are guided by the totality of their feelings, including organic sensations and emotions, and not only by rational prerequisites, using both the wisdom of the organism and the mind. They function existentially, accepting the process of development and the constant changes resulting from it.

The idea of a fully functioning student coincides with the definition of a mature student. Such a person can also be called creative and characterised as a person with a highly developed need for self-realisation. Thus, the goal of education in accordance with the humanisation aspect is the implementation of the strategy of the "logic of development" associated with progressive ideology and suggesting that the main goal of both education and upbringing should be the overall development of a person [14; 15].

Discussion

The results of a pedagogical experiment involved 3 teachers and 324 first-year students of a pedagogical speciality. They participated in teaching inorganic chemistry at the Abai Kazakh National Pedagogical University, K. Zhubanov Aktobe Regional University, and Korkyt Ata Kyzylorda University. The findings showed that the main curriculum, both basic and extended, pays great attention to the development of skills related to the development, preparation, and conduct of chemical experiments. Additionally, there is an emphasis on the analysis of their results with a focus on humanisation methods and fundamentals.

Most of these experiments can and should be conducted by the students themselves, and the rest – in the form of a pedagogical show. Students should improve the skills in registering research results, describing observations, and their interpretation and formulation of conclusions. When planning experiments and working with chemical reagents, it is necessary to pay attention to the observance of safety and health rules.

The experiment can be part of a lesson with an introductory, cognitive or strengthening function. It can also be conducted in separate classrooms, especially if the institution has a well-equipped laboratory room. The basic requirements of the curriculum describe the knowledge and skills that a student should possess at the end of the educational cycle [16; 17].

Their implementation can take place in a different sequence, based on the humanitarisation concepts of the teacher or the accepted curriculum, but all the requirements of the framework must be met. Some skills need to be consolidated throughout the entire training cycle, for example, chemical calculations, reading information from the periodic table and predicting the properties of a substance by the structure of its atoms or molecules.

The role of chemistry in general education in the context of social changes, in which humanistic natural education and the universal values resulting from it become important, shows the possibilities of chemistry as a natural subject with humanising and social features in discovering and building values that can guide students in life [18-20].

Following the results of the pedagogical experiment of the Almaty, Aktobe and Kyzylorda regions of the Republic of Kazakhstan, it was highlighted that modern education in universities acquires the features of pedagogical utopia and unrealistic attitude. Its significant utopianism or incomplete realism is overwhelmingly influenced by the peculiarities and requirements of scientific and technical civilisation, the market socio-economic system, and technocratism.

However, properly organised, properly integrated into the holistic system of modern education, humanisation education has no alternative and is irreplaceable. Thus, it is possible to maintain and effectively form a model of a versatile person and accept the desired quality of their existence and humanity.

Generally speaking, this is one of the determining factors of the student's survival as a human being. Modern projects of humanisation education of chemistry faculties, in the broader sense of a full-fledged and personality-forming general education, inevitably face a particularly difficult threshold of transition to a platform for the practical realisation of their goals and educational tasks [21-23].

Modern theoretical and methodological foundations of humanisation education are very diverse, constantly enriched and concretised. They contain both well-documented and convincing substantiations for their

practical application in plans and programmes at all levels. The reasons for the gradual but consistent introduction of these aspects into modern, global educational practice are mainly confirmed by the unilateral trends of the practice under consideration [24-26].

Namely, the predominance of utilitarian, temporarily pragmatic, practical, and useful attitudes, paying special attention to the adaptation of educated youth to a particular profession, in this case, chemistry, to prepare them as best as possible for a successful entry into the labour market and cope with its growing demands and strict rules.

Forced by the demands of scientific and technological progress, technocratic civilisation and a market system, the professionalisation of modern chemistry education in universities lends itself to unprecedented digitisation of cognitive activity of the mind and the transfer of educational content through current activities. Such a process inevitably leads to a serious unification and deformation of the cognitive image of reality and the intellectual limitations of the student [27-29].

Such a conceptual addition will receive a broader and clearer context of meanings for the foundations of humanisation education and a protective field against threats that exist within the framework of outdated and utopian aspirations lost in the modern world.

The currently dominant type of education, according to the majority of first-year students and teachers of the pedagogical speciality in teaching inorganic chemistry of the Abai Kazakh National Pedagogical University, K. Zhubanov Aktobe Regional University and the Korkyt Ata Kyzylorda University are unable to complete a large number of basic tasks concerning the correct and possibly complete establishment of a human personality, personal culture, and individual morality.

Humanisation training should identify and substantiate the forgotten and underestimated sources of life satisfaction that arise as a result of selfless, altruistic and collective activity. The current interest in the phenomenon requires a humanistic reading, bearing in mind the moral motives of transformations and enriching actions. Stimulating disciplines are defined as works of art or, in a broader sense, cultural texts confirming the humanitarisation of human creativity leading to aesthetic and moral enriching experience [30-32].

Thus, the unchanging achievements of humanity can become the main example of accumulated education. The ideas of humanising chemistry teaching are modern applied forms that are currently being developed, modified, and already have sufficient theoretical, conceptual and axiological bases that determine a constructive attitude to specific didactic programming and methodological activities [33; 34].

The pedagogical experiment showed that regardless of the specified division of humanising elements, it will always be about reflexive subject identification in accordance with their model. The widely understood educational environment attaches great importance to the essence of humanisation foundations. In this area, there is the main goal aimed at creating cultural and humanistic foundations with special emphasis on student autonomy.

Various pedagogical areas are aimed at the implementation of this undertaking, but the main focus is humanistic pedagogy is the pedagogical theory created based on reflexive practice and actions of pedagogy.

By creating a relatively autonomous scientific discipline, it does not depart from the main imposed value systems. The arsenal also includes: the education of values, learning in freedom, double subjectivity in education, the development of independence in the pursuit of self-realisation [35-37].

Therefore, it seems that they should be implemented at all educational levels, because the dynamics of changes in the modern world is becoming a problem for both students and teachers.

The results of the experiment indicate the persecution of the premises of humanisation pedagogy. This can explain a lot, especially in those areas of education where the effectiveness of educational processes is a value in itself, for example, in specialised professional lifelong learning, which should serve not only specific narrowly understood goals.

Educational technological processes are usually understood as those cognitive actions that are aimed at establishing the actual states that arise in the learning process. The lack of educational intentions does not allow making any humanising diagnosis. However, this is necessary when it is determined by the actions of certain states of things [38-40].

The simplest scheme for making such a diagnosis in the process of educational activity includes only one observation, and the one that relates to the state of things is achieved and is considered as the result of the actions taken. Thus, teaching chemistry becomes an element of social and educational reality, an important element of student activity.

The progress of science and technology taking place in the modern world is largely reflected in today's form of education. Currently, students of the faculty of chemistry are facing completely new problems caused not only by the above-mentioned progress, but also by changes in civilisation, social changes, and economic conditions.

As a consequence, this causes growing concerns about the instrumentalisation of chemistry, a departure from its humanising basis, in which a person should have the highest value. In view of these threats, the essence of today is the desire to form an intellectually and morally oriented attitude towards people. Such tasks, first of all, should be faced by universities that prepare future specialists for practical work.

Conclusions

Thus, the theoretical and methodological foundations of humanisation education in universities, using the example of teaching chemistry, fulfil their role in the present and are a chance for an effective educational future. However, the condition for the tasks set is the wisdom of teachers using this knowledge. Therefore, a very important problem of modern pedagogy is the stimulation of thinking, self-reflection, criticism, wise compromise.

Constantly asked questions, developing curiosity lead to a constant definition of oneself and personal attitude to the rapidly changing reality. Interdisciplinary connections are expressed in the development of a comprehensive view of the discipline being studied as a single science.

The orientation of learning to understand the deep, essential, system-forming humanisation foundations and connections between various processes of the surrounding world is a systemic feature of the fundamental nature of education. Basic knowledge changes relatively slowly and retains its significance, which allows the independent development of skills based on them.

Due to the large-scale and especially intensive changes in the education of the Republic of Kazakhstan in recent years, the study can note a return to various types of curricula with humanisation prerequisites.

The effectiveness of these interactions depends on the implementation of the proposed changes, continuous evaluation and professionalism of people performing current activities.

The humanisation of education is expressed in the consideration of individual personal characteristics and the orientation of the educational process to the development of skills required by society. It involves active participation in the life of society and satisfaction of individual needs. Additionally, it emphasizes the relationship between the existence of each student and culture.

This approach is based on the principles of student-centred learning, developmental and educational learning, and on the principles of accessibility, awareness, and cognitive activity. Since a necessary condition for humanising theoretical and methodological foundations is their fundamentalisation.

This creates an objective basis for the construction of the educational process, when it becomes possible to integrate various substantive and methodological aspects in the process of forming theoretical knowledge and practical skills. The orientation of education to the interests of the individual, the development of competencies, the development of creative principles and general culture are priority areas of reforming the education system.

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Conflict of Interest

None.

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Теоретичні та методологічні засади гуманізації освіти в університетах (на прикладі викладання хімії)

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Анотація

Актуальність. Актуальність дослідження полягає в тому, що освіту не можна обмежувати лише володінням знань і професійних навичок у вибраній галузі та вузькій спеціалізації. Існуючі засади підготовки випускників, спрямовані на поглиблення практики у одній професійній галузі, недостатні. У таких умовах освіта повинна забезпечувати отримання студентами знань і навичок, які забезпечать їм задоволення від навчання.

Мета. Метою дослідження є розгляд теоретичних і методологічних засад гуманізації освіти вищих навчальних закладів на прикладі викладання хімії.

Методологія. Методологічна основа включала кілька підходів до дослідження цієї теми, включаючи дидактичний, гуманістичний, загальнопедагогічний та педагогічний експеримент.

Результати. Дослідження теоретичних і методологічних засад гуманізації освіти в університетах, зосереджене на викладанні хімії, виявило ключові результати. По-перше, прийняття студентоцентричних методів викладання, спричинених переходом викладачів у роль організаторів навчального процесу, підвищило залученість студентів та незалежне навчання. По-друге, розширення освітнього контенту з включенням міждисциплінарних перспектив поряд із спеціалізованими предметами надало студентам більш комплексне розуміння хімії у реальних контекстах. Нарешті, зміна у ставленні та взаємини між викладачами та студентами сприяла створенню більш сприятливій та співдружній навчальної атмосфери.

Висновки. Отже, отримані результати підкреслюють важливість гуманізації у вищій освіті, особливо в галузі викладання хімії. Зосереджуючи увагу на залученості студентів, міждисциплінарному навчанні та підтримуючих взаємин, університети можуть створити більш насичений освітній досвід. Проте, реалізація стратегій гуманізації може зіткнутися з викликами, включаючи потребу у адаптації викладачів та розподіл ресурсів. Однак практичне значення цих стратегій у підвищенні якості освіти в університетах не може бути переоцінене, що підкреслює важливість їх ефективної реалізації та подальшого дослідження.

Ключові слова: медіаосвіта; цифрова епоха; медіаграмотність; журналістика; комунікації.