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Welcome from Rector

Lviv Polytechnic National University is a powerful educational and scientific centre of Ukraine, one of the oldest institutions of higher education in Eastern Europe, founded in 1816. Today Lviv Polytechnic aims to provide quality education, improve teaching, methodological and information support of the educational process, bring together fundamental science and higher education, enhance the economic efficiency of applied research and development (R&D), the development of international cooperation to facilitate the integration of the University into the world scientific and educational space.

Now Lviv Polytechnic is the publisher of 36 scientific journals and newsletters, 9 of which are in English. By this edition, Lviv Polytechnic National University launches the publication of the scientific journal “Ukrainian Journal of Educational Research”.

In today’s knowledge-based society, education and preparation of people for productive functioning in society has a special role. The main objective of education is to create human readiness to solve complex problems of an economic, political, and multicultural character. To develop scientific-methodological and legal guaranty of high-quality educational services we use achievements of scientists and scholars as well as the experience of practitioners being widely discussed in scientific publications.

I am convinced that “Ukrainian Journal of Educational Research” will become an important platform for the publication of educational innovations, discussions of current educational issues, a kind of guidebook for educational management.

I wish the editorial board, the authorship and readers fruitful cooperation and achievements for promoting the intellectual, social, cultural and economic development of Ukraine.

Rector
of Lviv Polytechnic National University,
Chairman of Lviv Rectors Council,
Corresponding member of
National Academy of
Educational Sciences of Ukraine,
Professor                                                                                                 Yurii Bobalo
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CHILDHOOD AS A PHENOMENON IN THE LIGHT
OF GERMAN PEDAGOGY

ABSTRACT
The article is dedicated to the problem of childhood as a phenomenon in German pedagogy. The main objectives of the article are as following: the theoretical analysis of scientific and pedagogical literature highlighting different aspects of the problem under research, and analysis of methodological renewal of German pedagogy during non-Herbart period and reformist’s movement prosperity of the XXth century. German pedagogy has been studied by foreign and domestic scientists: O. Kotsyubynskyi, N. Abashkina, T. Tokaryeva, N. Osmuk, S. Stelmakh, I. Rudkovska, K. Tkachova, I. Stashevska, H. Kornetov, M. Boguslavskyi, M. Pevzner, I. Batchayeva, L. Nesterova, N. Yudin, S. Kulikov, V. Veykshman, O. Piskunov, Z. Ravkina. In the article the analysis of complex reassessment of educational tendencies which gave the impetus to the implementation of educational formulae “vom Kinde aus”, “führen oder wachsenlassen” has been conducted. The particular attention is paid to the need of childhood’s understanding as one of the socio-cultural phenomena, which is connected with the adult’s space.

Keywords: child, childhood, German pedagogy, pedology, educational paradigm.

INTRODUCTION
The logical result of the modernization process is the constant presence of open, sometimes unspecified response to the problems of education of children. Nowadays Ukrainian education is largely determined by the perception and understanding of the cultural and educational traditions through the insight into the history of some problems of education in different countries made possible by modern researchers who find out and use interesting facts from history of education thus contributing to the introduction of innovative content, forms, methods and means of present–day family education.

Ukrainian education is full of elements of creative approach to studying the invaluable heritage of the educational theory and practice of European countries. The Federal Republic of Germany is one of them. Special role in the formation of the fundamentals of Ukrainian education science has been played by German scholars. The actual contribution of them into the development of Ukrainian pedagogy is not estimated properly, although the programs of several family centers operating in Ukraine are based on actual materials of German research. Replacing the existing theoretical and methodological apparatus and teaching practice by basic theoretical principles on and experience of German pedagogy should be made in the light of changing attitudes to child.
In the turbulent time of political upheaval the family was the first major educational institution. After reorganization of Gerbart’s system, the social and family education accumulated rich ground for change as it became ineffective and needed elimination. This turn of events caused the increase in the number of appeals to humanistic achievements of educational theory.

Today, intercultural cooperation allows creating adaptive environment for borrowing useful foreign experience in Ukrainian educational field. In this context, the history of pedagogy has an interesting model to study – the reformist movement during the early XXth century, which imposed a noticeable imprint on the Ukrainian educational theory. This means the application of adequate educational method that relates to the uniqueness of the child, without the use of templates. Its development stage coincides with the socio–economic changes in the period of strengthening educational contacts on national and international scale.

In practice, there arose a problem of education tolerant approach to improving educational influences on personality. L.Tolstoi in “Education and upbringing” identified some aspects of education, in the first place – parental desire to educate their children as the parents themselves are or could be”.

THE AIM OF THE STUDY

Germany has always been the cradle of all main pedagogical movements and the most productive creative laboratory. German pedagogy was able to reach a new level, was deprived of scholastic approach, which gave ground for the development of all spheres of public life. Being linked with the concept of humanism, it granted every child an opportunity to become a full personality and symbolically these years were called “the century of child” or “non–violence education”. Its semantic content is determined by many scientists as a pluralistic phenomenon with such dominant components – the principles of democracy, anthropology and socialization. A wide range of alternative educational institutions – schools of social education, forest schools, rural communities, schools with shorter school day and others – emerged in the course of applying pedology–centric ideas in promotion of “cognitive stimulation of students”. In their internal organizational structure they resembled the family environment.

The science of pedology, being newly created relatively independent educational branch, together with related sciences – pedagogical testology, history of childhood, teaching pathology – accumulated certain achievements of these disciplines and recognized the direct dependence of biological and social factors, the influence of which was considered to be unavoidable and unchangeable. Pedology was intended to solve all the “painful questions of education” (Dewey, 1938), having defined the features of development and impact limits on a child.

THEORETICAL FRAMEWORK AND RESEARCH METHODS

Having comprehended this area of research, the German pedologist E. Meiman suggested dividing pedology into three interrelated branches: anthropology and anthropometry that give a comparative analysis of physical and spiritual development in different conditions of life; medical examinations that describe functions of the child’s body organs and the difference of these organs in adulthood; testing and and confirming experiments in psychiatry and psychopathology.

It should be emphasized that the comparative material has been obtained by systematic investigation with the target impartiality in trying to find ways to implement the proper educational objectives. Scientific and practical interest in reformist educational theory was conditioned by a numerous national studies in comparative education, which demonstrated commitment to the outstanding problems of the aforementioned study and understanding of holistic education category in the context of foreign experience. O. Kotsyubynskyi, N. Abashkina, T. Tokaryeva, N. Osmuk, S. Stelmakh, I. Rudkovska, K. Tkachova, I. Stashevskva analyze thoroughly the ideas about civic, artistic and musical education.

Various aspects of this paradigm were studied in foreign psycho–pedagogical science: analysis of the “new education” in terms of civilizational approach (H. Kornetov, M. Boguslavskiy), nature of innovation processes in the German education of the reformism period (M. Pevzner, I. Batchayeva, L. Nesterova, N. Yudin, S. Kulikov, V. Veykshman, O. Piskunov, Z. Ravkina).
RESULTS

Explaining the existence and rapid rejection of different educational systems by German society, researchers prove that this occurs primarily when the paradigm stops working and “goes into the shadow” though later it “can reappear as the leading one again or be one of those which will continue to be focused on” (Hering & Hövel, 1996).

That’s what happened to the authoritarian paradigm of education, which at one time served as the official state doctrine in Germany. According to the scholar, the reason for its long existence was traditional paternalism – “strong and strict father teaches his son to live right, and the son will be ready to face challenges of life” (Hering & Hövel, 1996), where such things as suppression of liberty and child corporal punishment were justified though did not give proper effect. The discussions of this problem had the main aim of developing axiological foundations of humane contrary to authoritarian education” (Warde, 1960).

The apparent discrepancy and inconsistency of the traditional education practices to the demands of the time put forward the principle of child’s self–education as the leading determinant. First of all, contradictions in the structure of the traditional Herbart’s system did not prepare young people for “cooperation” with society, and most importantly, they did not ensure complete dichotomy between teachers and students, parents and children. It means that the reorientation of the education implied reorganization and reformation of relations in these small social groups. At the beginning of its emergence, the new theory of education was characterized by: idealization of childhood, belief in absolutely perfect child nature, beauty and harmony of the child’s soul, belief that the accumulated parents’ own experience is the basis of their children full development and it is used by children for developing their own personal properties, elimination of any child abuse and belief in the child’s internal activity (Brezinka, 1978).

G. Litts talked about education and teaching of children without coercion, about the right of children to recognize and “promote” their interests in the family circle and outside”. He stressed that the child should develop a “healthy self–confidence and confidence in the face of others”. To teach children to correctly form this feature G.Litts insisted on the necessity for children to have a compulsory structured daily schedule of practicing different activities: studying, playing, working. Landerziehungshaus, as he pointed out, was created as a prototype of the family. Coordination of the developing educational activities for children in these institutions was held as follows: “a teacher with small quantity of children (10 –15 persons) formed something like a family. The day began with a joint breakfast, before which children read passages from the Bible or sang songs” (Luise, 1998).

Further routine covered classes with short breaks, work in the garden, workroom or in the field, visiting the church, later there were talks near the river, children were engaged in sports, artistry. Classes were considered by children not just as entertainment but as the desire for something beautiful, pure, perfect. Being usually located away from cities, such institutions kept the children away from the negative impact of civilization. Educational tasks were performed through so–called living together with parents – joint plays, celebrations, evening talks. In O. Cherkasova works we can find contemporary description of the Hamburg schools. Their specificity was the direct emotional experience gained from any activity (Steiner, 1921).

The existence of such “home houses” provided “a simple, healthy, effective life and social idealism”. The atmosphere of intra–school life was humane, providing conditions for shaping “strong character, will, willingness to help one another” (Steiner, 1971).

We can say with confidence that the life of inmates in such institutions was as close to the family life as it was possible. The intensive development of social pedagogy was observed in this period of the authoritarian paradigm destruction that strongly affected theoretical principles of education in Germany. It is important to note that the appearance of social pedagogy caused a lot of new diverse, critical views. Scientists stressed that the reformist principle of socialization was dualistic in nature and it implied, on the one hand, the development of child’s individuality (individual socialization) but on the other hand, the formation of values and norms of joint life (sharing the “collective ideas”).
An interesting way of the parents’ pedagogical teaching (“pädagogische Führung”) was suggested by the founder of cultural pedagogy Theodor Litt. According to it, there is the distinction between “to direct” and “to bring up”. “Directing children is completely mechanical and thus can be compared to driving. The tutor sets the goal and realizes the path to it” (Luise, 1998).

The opposite point of view – “to raise, to bring up” – implies organizing.

Th. Litt considers that the child “is unfolding from inside” according to his/her immanent law. The educator here plays the role of “a gardener who is growing and cultivating”. During the reformist pedagogy scholars were more and more inclined to believe that education should “proceed from the interests of the child”.

Considering the need to provide impetus to form their own initiative and will, each rising personality this phenomenon had different controversial views. It is important to note that representatives of all the new trends of education had a common vision of the child – as a source of educational standard. In this context, educational theory – reformism regarded as a cultural construct of childhood, the analysis of structures “vom Kinde aus” and “führen oder wachsenlassen” proves it.

When the state and other social institutions cause the feelings of doubt, resistance and suspicion in the majority of population, the family becomes the object of sacralization. J. Herring stated that there was brewing a destructive wave of unrest as to the traditional pedagogy in Germany. But for the abandoned attitude to the problems of childhood, there became urgent the issue of erosion of the “old school and education system” (Hering & Hövel, 1996).

In our opinion, the search for solving these problems should be conducted in the light of implementation of anthroposophic paradigm ideas. Waldorf pedagogy with its network of educational institutions and family centers existed, according to research by F. Kalhren (Brezinka, 1978), almost till 1938. In other Western European countries it existed a little longer. Medical and educational centres created after the R. Steiner’s system were very advantageous as they involved parents to cooperate with the school through organizing weekly educational events. The National Socialist regime in 1935 banned the work of such institutions, their activity was restored shortly after the fall of the Third Reich. Stuttgart became the new cultural center of the revival of the anthroposophy ideas. It was joined by Nurnberg, Kassele, Bochume.

The concept of the “Waldorf pedagogy in Ukraine” project has identified and justified the development of educational programs, taking into account the specifics of its harmony with Ukrainian humanistic traditions. It has classified humanity principles specified by R. Steiner. Based on the characteristics of each period of the child’s development, according to the age and potential, the project is aimed at the full development of children’s creativity and imagination.

The work also presents a systematic reflection on the achievements, the correct selection of the theoretical and methodological support for the introduction of Waldorf theory in Ukrainian educational space. There is observed the positive trend to optimize the content of education, to provide children with rationally arranged subject–game environment. The recommendations made by the youth services of the Federal state of Saxony state that the content of family education should be formed indirectly, abstracting from the family type (full, partial etc.), having created a complete family atmosphere (Luise, 1998).

CONCLUSIONS

In the process of forming self–sufficient family education content it is recommended: to use the experience of German family centers (natural type houses, advisory centres for families); to actively introduce methods of free education (synchronous interaction of parents with a child in the family, cultivation of various forms of interactive activities with creative elements – rhythmic games, excursions, talks while playing with parents etc.); to widely implement principles of the pedagogy of personality to overcome socio–dictated subjective attitude towards the child as a generalized abstract collective member of society; to organize family education on the basis of priorities of interests, individual inclinations, child’s activities and initiatives while reducing the formalized attitude of parents to this process.
REFERENCES

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THE PROBLEMS OF STUDENTS’ REPRODUCTIVE HEALTH IN THE CONTEXT OF GENDER SOCIALIZATION

ABSTRACT
The article deals with the problems of reproductive health of young people in the context of gender socialization. The purpose of the article is defined as synthesis of psychological, and social and pedagogical problems associated with performing the tasks of strengthening reproductive health of students in the context of gender socialization. The author has defined the following objectives: to justify the interdependence of successful gender socialization and reproductive health of students; to show the impact of gender stereotypes on the process of socialization and the tendencies to destroy them among today’s students; to summarize the experience of sexual education within the students’ environment. The current trends of gender socialization of students and the impact of gender stereotypes on this process are highlighted in this article. Summarized results of the performed studies with the students from different Ukrainian regions in order to determine the levels of family relationship culture, and attention to the questions of reproductive health are presented. It is underlined that one of the ways of working with the students is sexual education that promotes social sex–appropriate behavior.

Keywords: student youth, reproductive health, gender socialization, gender stereotypes, sexual education, gender role behavior, femininity, masculinity, androgyny.

INTRODUCTION
The present-day life of Ukrainian people is accompanied with a profound violation of the mechanism of its reproduction, the deterioration of not only quantitative but also qualitative characteristics of new generation, which characterizes the unfavorable demographic situation that becomes sustainable. Of course, this situation is caused by the peculiarities of the reproductive behavior and reproductive motivation of the population that depends on economic, social and psychological situation. Reproductive health is of essential importance for reproductive performance. At the same time, during the periods of political, economic and social instability in society, in addition to an increase in the youth asocial and criminal behavior, the situation is complicated by the increase of sexual irresponsibility, which negatively affects the reproductive health.

The analysis of scientific research works (O. Voropai, R. Kyrchiv, M. Kryshchuk, S. Kovalyov, V. Steshenko) confirms the idea that some relatively new trends concerning marriage and family are associated to some extent with the increased commitment of young people not only to Western standards of living, but also to a different system of values and priorities, family traditions. Despite the everlasting Ukrainian traditions and relatively early marriage, now a part of young women (not to mention men) is not seeking to enter into formal marriage, while women sometimes prefer to have a child “for herself” and bring her up without her husband. Majority of women from the middle class, representatives of students want to create a family only after getting education and building a career. However, a common thing is to focus on career, achieve material prosperity, and strive solely to the professional fulfillment for the entire period of working life. Therefore, the alienation of family and parental roles occurs in which successful professional activity is carried out at the expense of raising children, and even at the expense of having children. It should be noted that according to the Ukrainian customs, a unity of two faithful loving hearts was preceded by quite a long acquaintance of young people: participating together in street festivals, parties, meetings. Cohabitation before marriage was strictly forbidden in Ukraine. Respect for the girl’s honor was characteristic of Ukrainian family life and human relationships (Kyrchiv, 1990, p.134–135).

The church studied related documents of each pair very meticulously before giving its consent to the marriage. Wickedness is known as rare cases in our history. The wedding ceremonies, rituals, full of high moral inspiration, maiden honor and youth chivalry, love can be learned about from the works of O. Voropai, R. Kyrchiv, M. Kryshchuk, V. Skurativskyi (Voropai, 1966, p. 442). Unfortunately, now we witness the nation’s degeneration, degradation of bodies and souls. Pure, true love is just ridiculed. Deep spiritual feelings of love are transferred to the sphere of physical relations. However, the initiation of eroticism in mass and elite culture, increase of the overall level of sexual freedom, weakening of external social control, early puberty and awakening of sexual interest lead to the evolution of sexual behavior of young people. It is now characterized by the following features: early sexual activity (long preceding the achievement of social maturity) and increase of its intensity, standardization of sexual behavior norms for boys and girls, the increasing number of premarital relations at a low level of sexual and contraceptive culture. Rather informal early marital relations, including “trial marriages”, consensual unions and transit marriages are becoming increasingly common among young people. Young people often see a particular option of the above–mentioned ones as a temporary alliance formed for a certain period of life, divorce is accordingly regarded not only as a vital disaster, but also as likely, and even a natural phenomenon when “relations have exhausted themselves”. This increases the number of personal tragedies and social problems.

Therefore, there is a need to improve sex education of today’s youth, including the task of strengthening the reproductive health in dimensions of gender socialization.

The analysis of socio–pedagogical research works has proved that the following factors make the above–stated problems relevant: inability of young people to refuse to meet their own interests in favor of the family; negative social experiences in marital relations resulting from casual sexual relationships or living in civil marriages; limited expertise in the field of physiological and
psychological differences between men and women; available pressure of sex–role stereotypes formed within the parent family, referent environment and natural social impact.

THE AIM OF THE STUDY

So, the aim of our research is to synthesize psychological and social and pedagogical problems associated with performing the tasks of strengthening reproductive health of students in the context of gender socialization. We define the following objectives: 1) to justify the interdependence of successful gender socialization and reproductive health of students; 2) to show the impact of gender stereotypes on the process of socialization and the tendencies to destroy them among today’s students; 3) to summarize the experience of sexual education within the students’ environment.

THEORETICAL FRAMEWORK AND RESEARCH METHODS

Analysis of current social trends reveals the fact of gender discrimination, which is to limit the social, professional and personal opportunities for men and women because of the inadequacy of public perceptions of a gender role. Therefore, the question of the dynamics of gender differences and their impact on individual way of life of a young person and the possibility of personal realization in the new socio–economic conditions are of considerable scientific and practical interest (Sh. Bern, M. Argyle, M. Mahuyr), as they reflect social trends within the academic environment. The social development is undergoing braking influence of gender stereotypes through unconscious excessive emphasis on the differences between men and women. Besides, gender differences are perceived as significant, as the Sh. Bern notes, in the fields in which their gender is evaluated as positive, and, vise verse, the value of a stereotype is tried to be reduced in an unfavorable characteristics of sex.

Recently, as the T. Hurleva points out, ideals of femininity have undergone some transformation. Today’s femininity is based not on the weakness and dependence, but on spiritual strength, education, energy, that is harmoniously combined with tenderness, gentleness and compassion. But the essence of femininity in the past, today and tomorrow is a perception of emotional sensitivity, flexibility of nature, the specific attractiveness for men. High traits of women are and remain to be the traits of a mother, caring and gentle wife, true friend (Glavnyk, 2003, p. 12). Occupational expectations and social activity are more typical for men.

RESULTS

The development of gender roles as socially conditioned patterns of gender–role behavior occurs in the context of gender socialization based on regulatory requirements and expectations. Through the adoption and implementation of social roles, an individual is joining the group, society as a whole using the mechanisms of social adaptation and personal expression. Gender–role socialization is mastering by human being the gender roles, societal expectations on these roles and the formation and consolidation of relevant psychological symptoms, confirming the set of behavior forms according to gender role (R. Hof, E. Shore, K. Haider). Thus, the sexual and gender roles have a special place in the process of socialization and are closely associated with that identity of the individual. If the real human behavior is different from social expectations according to gender, then the society makes a certain pressure, resorting to sanctions. In this case, social stereotypes concerning male and female gender roles can influence the gender development, thus limiting self–identity of each of them. It should be noted that gender–role socialization of men and that of women have many differences. Stereotyped for women is the commitment to family values, so they can have serious problems in the process of professional self–realization. Distinctive characteristics of female psychology reflect directly or indirectly the peculiarities of cultural context. However, even correctly received results indicate insignificant differences between women and men. Moreover, as it is proved by H. Craig, in recent decades, fixed differences are becoming less striking as it is happening due to the reduction of gender segregation processes of socialization.

Thus begins a new stage in the study of sex–role behavior, the model of which is called androgynous. A new concept was introduced by American psychologist Karl Jung in the 70’s of last century, and S. Bem proved that masculinity and femininity are not opposed to each other, and demonstrated the possibility of combining the best demonstrations of both sexes.
In the current research, the tendency of rejection of simplistic ideas about femininity and masculinity based on character traits is observed. There is a sharp weakening of the polarization of male and female roles. A real model of masculinity – femininity has acquired features of continuity, which assumes that a man can be strong and energetic, but at the same time, he does not have to be rude and aggressive, and women’s tenderness is not seen to be necessarily passive. A continual model allows variations, even transitions in wide ranges. Joint training greatly diminishes the differences in standards of conduct and psychology of men and women. The androgynous model of gender roles is getting more common.

A survey conducted among Ukrainian students from different regions (the total of 780 people) concerning the distribution of family responsibilities has shown a strong tendency towards the destruction of traditional stereotypes in this sphere, although years of staying in the parental form of a family form the relationship patterns that are directly related to the expectations of sexual–role behavior models in the future marriage. However, having analyzed the obtained experimental data we can estimate that modern young people tend to form gender parity by changing nature and mechanisms of reproduction of socially constructed traits, roles and relationships. Thus 85.9% of the surveyed have no tendency to strict regulation of family responsibilities by gender affiliation, they are more comfortable with mutual support when performing household chores.

In order to determine the levels of formed culture of family relationships within the student youth, their attention to the reproductive health we used a survey, questionnaires, purposeful pedagogic observations, individual and group interviews, solving problem situations, watching and analyzing thematic television programs.

The questionnaire questions predicted receiving answers on issues that concern young people, their attitude to marriage and family awareness of marital roles of husband and wife, the functions of the today’s family, focusing on creating their own family and conditions of making the family “happy”. The choices offered for every question were a kind of listing of certain family values in this field. A separate unit was made of questions that made it possible to clarify the understanding of the nature of young people’s reproductive health and the risks associated with it. Respondents were asked not only to mark just one answer but also to hold their ranking. Among the used methods there were the methods of resolving problem situations, the content of which reflected the ways of young people’s behavior in the case of having tempting offers (Sorochynska, 2003, p. 132–135). Generalization and systematization of the obtained empirical material allowed us to define three typological groups of students, each of which is characterized by certain features.

The first group. Students have a thorough knowledge of the family’s functions, conditions of its creation and successful existence; rules, regulations and samples of cultural communication; understand their importance for effective interpersonal relationships in a family environment; reveal attitudes to the family as important personal values; have intention to create a family, respect the partner as a significant one; possess empathy, interpersonal skills to build relationships based on moral norms of coexistence, have developed communication skills. The issue of reproductive health is analyzed occasionally, mainly associated with the general state of health. The concept itself is treated by them only as the ability to implement physiological functions. Premarital sex is not approved. However, the respondents allow the opportunity of having it in case of mutual love; they do not see the value of previously acquired sexual experience for building full–fledged family relationships as they are based on mutual respect and love. This group constitutes 8.7% of the total number of the surveyed students.

The second group. The students are informed enough about the functions of the family, conditions of its creation, but they attribute the family successful functioning largely to material factors; knowledge of the culture of communication is characterized by a certain inconsistency; the same tendency is typical to their notions about the importance of standards and rules for relationships in the family environment; demonstrate a positive attitude to creating a family, but they believe that first you need to live in a civil marriage more so that the public morality does not put serious obstacles to this; are inclined to believe that early sex relationships are connected with
specific risks, so extensive information on the prevention of such risks is needed; they cannot assess unambiguously the value of previously acquired sexual experience for family relationships; the ability to build interpersonal relationships with the opposite sex is marked as fragmented, although they have well-developed communication skills; the term “reproductive health” is interpreted only as the ability to have children, the risk factors are not associated with their own style and way of life. The total number of respondents in this group is 71.2%.

**The third group.** The students have wrong ideas about the family, conditions of its building and existence; their knowledge of cultural norms and rules of behavior and communication culture is fragmentary and often associated with negative samples, which are perceived as justifiable for family cohabitation; the family is treated from purely utilitarian positions or just negatively; partners for interaction and communication can be treated with arrogance, disrespect, contempt; they reveal a cynical attitude toward human sexuality; premarital sex is fully justified, considered essential for acquiring sexual experience; they are skeptical of any intentions to expand informational awareness of reproductive health and risk factors; they emphasize that it’s their personal life, which young people cope with independently. This group amounts to 20.1% of respondents.

Student’s awareness of the need to be prepared for creating a stable family is a system of social and psychological affirmations of an individual that defines the emotional and psychological attitude to the style and values of marriage. There are two main types of sex education programs. The principle of the first is the belief that it makes no sense to call young people to change their behavior and therefore proposes to learn to protect their health by using contraceptives. The principle of the second program is the belief that young people can be convinced to abstain from sexual relations before marriage. The third variant is also possible: to convince in abstaining from sexual relations before marriage, but to acquaint with contraception.

An integral part of gender socialization of students is enhancing the educational component because the primary sexual socialization occurs through evolutionary mechanism of identification with adult members of their own sex. The low level of pedagogical culture of microenvironment often leads to social exclusion in the implementation of gender roles. Therefore, one of the ways of educational work with students is sexual education as a process of systematic impact on the sexual consciousness of the individual in order to optimize personal development, development of social sex-appropriate behavior. Moreover, the system of educational work with students successfully applies the elements of the problem resolving that direct students to a reflection, systematization of information and the development of social and perceptual skills, that’s the ability to imagine themselves in specific situations, exercise moral choice. The method of selecting the didactic tasks of problematic nature in the sex education of students allows them to learn to compare known and unknown, common and scientific knowledge, to formulate a paradoxical problem solution of the type: “Love is the foundation of happy intimate relationship. Nevertheless, marriages based on love break down much more frequently than those based on rational calculation. Perhaps it is not necessary to love, but to learn to choose a partner sensibly?”

The most efficient forms of educational work are heuristic discussion, group problem solving situations (so-called mini-debates) and plot-role-playing games. Heuristic discussion is a series of interrelated issues, each of which is a consistent step towards solving a major problem. Questions to the audience are the basis of dialogue communication. Each of them seems to push to searching for arguments in a particular direction. For example, stating the reason for a divorce the former bride and bridegroom usually write: “We are people of different temperaments”. Maybe they are wrong, and it would be more honest to say: “We are people of similar temperaments?”, “What reason is more truthful”? Plot-role-playing game as a form of sex education is particularly effective in clarifying moral and psychological foundations of the relationship. Participants must find the solutions to ethical problems in interactive communication; bring the solution of a specific life situation to its logical conclusion. A moderator can replace the members of the game in the course of a dialogue especially in order to aggravate the situation in order to penetrate deeper into the moral and
The psychological nature of the phenomenon. For example, students are proposed to model relationships of an ideal family, to hypothesize on possible difficulties and their causes.

The effective but the most labor-intensive method of sex education is the research method within the use of which college students are involved in the formulation of self–moral and psychological problems related to gender or sexual behavior, and in the search for solutions to the problems. For example, the students are proposed to comment on the moral idea of the story "The Fanlight" by F. Kryvin or to compare the modern idea of gender equality with the words of P. Beaumarchais: “The Nature said to a woman: “Be wonderful if you can, be wise if you want, but prudent you should be certainly”.

The most important task of sex–role socialization of young people is to develop ability to love, in the broadest sense of this word, to respect yourself as a representative of a particular sex, to take care of your mental and physical development, to learn to understand your own body and sexual feelings, to strive to create harmonious relationship with the opposite sex on the basis of friendship and respect that are the foundation of reproductive health.

CONCLUSIONS

Important social and pedagogical conditions allowing modern youth to adopt of values–based sense of reproductive health is the development of positive motivation in creating a family; formation of adequate ideas about the nature of family roles of a husband and a wife, a father and a mother within the family; understanding the concepts of “family values” and “responsible parenthood”; development of moral qualities of a future family man based on the ideal of love; humane treatment for themselves and other family members, especially children; formation of skills in order to prevent domestic violence, to guarantee children’s rights and to find constructive ways of conflict resolution.

As a result, social and pedagogical aspect of the researched problem implies expanding educational interpretation of family values, which involve and include a set of traditions, rules and standards of conduct, moral and aesthetic priorities and identifies educational and developmental opportunities for family life, family traditions, modern forms of family life built on respect for the principles of a healthy life.

At all times, all peoples passed their knowledge about family, the structure of family life, performance of marital and parental roles to the younger generation. The further research of the issue requires proper scrutiny of the past heritage, analysis of the research done by modern scientists who have not received adequate coverage and require more attention. In particular, the formation of the moral foundations of responsible parenthood deserves attention of researchers.

REFERENCES

CREATIVE WORK PEDAGOGY IN THE CONTEXT OF MODERN TEACHING PARADIGM

ABSTRACT

The article deals with the problem of creative work pedagogy in the context of modern teaching paradigm. The aim of the article is to consider possibilities of applying main provisions of the creative work theory supported by the Polish researcher A. Goralski and American creative work methodologist D. Poya into the practice of teaching physics taking into consideration some modern cognitive investigations of psycho–physiological characteristics of a human, in particular. The main objectives are defined as the theoretical analysis of scientific and pedagogical literature highlighting different aspects of the problem under research, and inquiry into the main tenets of the theory of creativity of A. Goralski that integrates logic, ontology, epistemology, psychology and creative work pedagogy. The authors present the basic provisions of the modern theory of creativity in the version of the creativity researcher A. Goralski. The ways of implementing key provisions of the theory into practice of teaching physics based on some results of modern cognitive investigations as well as recommendations of American creative work methodologist D. Poya are considered.

Keywords: creative work theory, creative work pedagogy, algorithmic and heuristic methods of teaching, conatus, creative work training.

INTRODUCTION

Education is known to play an important role in the comprehensive development of the individual and is the process and the result of mastering the system of knowledge and skills by students. Today the tendency of transition from traditional “information–performance model to creative–search model in teaching natural sciences is becoming increasingly noticeable (Atamanchuk, 2010, p. 5). In complicated changeable life conditions it is just a creative person who is best focused, works better than others, is able to make the best decisions, being capable of generating and using novelty (new ideas and plans, new approaches, and new decisions). So the problem of departure from traditional teaching towards teaching creative work, preparing students for professional creative activity that per se is rather unusual – how to teach something you do not know yourself i.e. new, creative things – is of great current interest. In general interpretation, this problem has two facets: theoretical (methodological basis) and applied (forms and methods of
teaching). In other words, it is highlighting theoretical and methodological fundamentals and using them as foundation of building concrete forms and methods of teaching creativity.

THE AIM OF THE STUDY

The aim of the article is to consider possibilities of applying main provisions of the creative work theory supported by the Polish researcher A. Goralski and American creative work methodologist D. Poya into the practice of teaching physics taking into consideration some modern cognitive investigations of psycho–physiological characteristics of a human, in particular.

THEORETICAL FRAMEWORK AND RESEARCH METHODS

A. Goralski in his works (Goralski, 2002, 1998) considers creative work as a certain kind of handicraft or skill pertaining to human activity that has its own traditions, mastery, corporate character, professional secrets and regulations that can and are to be taught. His creative work theory embraces some interrelated parts that accord with standard philosophical division: logic, ontology, epistemology, psychology and creative work pedagogy.

The methodology of our research comprises different theoretical methods. We have used the comparative–historical method; logical and comparative methods, methods of induction and deduction, content analysis etc.

RESULTS

Creative work logic. The central notion of creative work theory is synthetic intuitionism that compliments analytical rationalism. The latter is well highlighted in the national literature. As to synthetic intuitionism it is: first, the way of performing discourse not with a person (as in the case of analytical rationalism), but with reality, and it is directed either to history or to future; at the same time it does not depend on space coordinates, that is, on circumstances; second, synthetic intuitionism lies in capturing “the clue”, something that makes the synthesis possible and gives the variety of content, sensitiveness and openness of language ascribing to symbolic enthusiasm etc.; third, synthetic intuitionism leads to objectivation of its discourse and “clue” into certain image – expressive, universal (in space and time), archetypically obvious etc.

The student like a creator leads a certain discourse not with a person, but with some concrete reality filled with professional contents, solving problems algorithms, phenomena and notions etc. during the period of studies. The “clue” is the minimal chain of teaching actions created by the student that depends on the subject specifics, physics, for example, that is: task analysis, diagram, scheme, algorithms (approaches) of solving problems (morphological analysis, spontaneous group thinking, search matrixes, systems approach) etc. The solving process itself is the subjective discourse (“the clue”). It should be evaluated by the teacher.

Creative work psychology. Creative work is considered as the manifestation of transgression – the behaviour that steps outside the typical activity due to which new structures are being formed or old ones are being ruined, positive and negative values are being created that are the source of development or regression. We consider now the creative approach to solving problems.

Creative work motivation is the so–called “hubristic” motivation that is an attempt to confirm and enhance your own value. The student mind is the orientation system and will that perform leading functions playing a specific role in creative behaviour. The main inner (psychological) position of a person is characterized as being open to the whole world.

Creative work pedagogy. The central notions of creative work pedagogy are the teacher (master) as a means of creative work pedagogy and the interconnection student – teacher that is always individual and characterized by the positive synergy of compulsion. This interconnection is displayed both in the intellectual and emotional, or moral plane. It is critical for the student to get confirmation of the importance of his/her work and its results from the teacher (master). Thanks to the student the teacher has a possibility to check and develop his/her skill. Pedagogical ideal at that remains quite traditional. It is the student who has a desire to become a master, that is, a professional in his/her field and to work creatively on his/her own. The critical issue at that is that the teacher (master) can help a student to identify and develop his/her individuality.
In terms of creative work ontology the teacher’s skill lies in bringing home to the students in different ways the necessity to perform academic professional tasks, the students being ready for that at the moment.

Creative work pedagogy is transformed into mass school pedagogy and is called upon to create a number of competencies set by the curriculum.

To solve problems of creative work studies it is necessary to take into account psycho–physiological preconditions of person creative potential development, memory, right and left hemispheres thinking, the rapport between the intellect level, knowledge, and creativity. Memory “is a very big part of talent. The phenomenon that we call talent or even genius depends to a high degree on the ability to use memory correctly in order to find the past, present and future analogies that are of higher importance for the new concepts development” (Blonskii, 2001, p. 105). The cognitive theory considers memory as a complex information system in which processing, saving and keeping information takes place. The logic memory is considered to be the highest stage of development when it is already difficult to differentiate it from thinking. In the process of developing memory is preparing to substitute itself for thinking. But thinking is developing only at certain, very high level of memory development (Blonskii, 2001, p. 241). The interrelation of theoretical and practical, logical and imaginative components of thinking is related to the functional asymmetry of brain. It is well known that the left hemisphere of brain is responsible for the language, analytical and successive information processing providing in such a way consecutive analytical thinking. The right hemisphere controls sensory and motoric functions, operates the imaginative information, manages skills related to visual and spatial experience. It is a medium of the unconscious strength of creative person; it has lower ability to catch the plurality of relations and organize polysemy of context. It is the creative process that creates polysemy of context. It needs less psycho–physiological efforts and lower level of additional brain activation than mono–semantic context creation. Both styles of thinking in people with low creative potential need equally high brain activation. Easy transfer from abstract to concrete thinking and vice versa indicates good right and left hemisphere thinking components, integration, flexibility of thinking, capability to reject stereotypes and skills to break the psychological barrier of the standard approach to phenomena, and this is the first step to creativity. In early childhood, imaginative thinking prevails, but all our education system is conducive to the development of formal logic thinking and acquiring the ways of one–meaning context creation. It can be treated as a systems mistake as the more efforts are applied in the process of teaching for logical semiotic thinking, the more efforts are needed then to overcome its limitations.

The interrelation between the intellect level, knowledge and creativity is also complicated. Ex facte it is obvious that keeping big amounts of information in memory enables to find out different approaches to solving problems. However, the investigation of students’ activity in the process of teaching showed that those who mastered much knowledge become competitions and contests winners mainly because of their erudition that itself becomes an instrument of limitation directing to the stereotype problem solving. “…high (even very high) level of intellect does not guarantee creative achievements. One can be an intellectual but cannot become a creator” (Druzhynin, 2007, p. 171). Sometimes students that have comparatively less knowledge are able to work creatively, catch problems as if from outside, to show the ways of their solving, outline general features of expected new results.

In the applied part of A. Goralski creative work theory the main didactic means of creative work teaching are “creative work models” and “reasonably selected sets of tasks””. The process of teaching depends on many factors that influence knowledge acquisition, among them being the personality of teacher and individual perception of the new information by the student. If a teacher (master) is absent its role can be played by the models of creative work that are presented in the way of didactic materials. These are the models of didactic creative work done by scholars, teachers, and methodologists, e.g. textbooks, manuals, methodological materials etc. (Shvai, 2012, Shvai, 2011). They can carry out the function of mediator in the academic materials exchange between a teacher and a student, give a possibility to take into account individual characteristics of
each of them, for example, the work tempo, temperament, mood, ability and readiness to work, motivation and the creative work level.

**Epistemology of creative work.** From the point of view of epistemology and heuristics, creative work of the student is a subject of reflection according to the hypothesis that we possess only the basic knowledge on creative work and creative activity, that is, we apply different strategies and instruments for their development.

**Methodology (or meta–methodology) of creative work.** The central link of this proposition is meta–method or the method of methods, i.e. designing the methodological system of the subject, the model of pedagogical interaction in the process of education. A completed methodological system is properly realized in the way of teaching model (physics) with the help of appropriate creative work pattern – the didactic materials.

These postulates are directed to the comprehension of physics teaching modern paradigm in which a proper place will be occupied by personality development, creative potential, in particular. In didactics, the following main features of knowledge are differentiated: completeness and depth, systems character and efficiency, concrete nature and generalization, awareness and strength, flexibility as an ability to reject stereotype mode of thinking and to come over the psychological barrier of the standard approach to phenomena. The last is the first step to creative work. The ability to marvel the world is one of the conditions of creative life.

A big arsenal of didactic tools should not be used for the creative abilities development. To work creatively means to apply such didactic approaches that make the process of teaching more interesting and effective than a traditional one. It is also related to improvement and modification of content and teaching methods that stimulate motivation for studies. Contrary to the creative studies creative work teaching as creative personality building is directed to the development of individual ability to think and act creatively. Creative work instruction also provides for creative teaching as creative work stimulation exactly needs availability of teacher creative abilities. So the teacher that teaches creatively does not teach creativity, but the one that teaches creativity simultaneously realizes creative instruction. It is impossible to develop creativity without creative application of methodical systems, strategies, without new and original didactic tools development, without innovative didactic approaches.

Pedagogy of creative work is directed to creative abilities development. One of the main didactic factors of creative abilities is creativity training that “provides necessary skills for the creative work that are indispensable in creative activity” (Goralski, 1998, p. 18). Creativity training that is aimed at creative abilities development of students necessary for the future professional creative activity should be carried out as group classes. Creativity training in the process of physics teaching is a system of didactic group classes that are structural components of the academic process in physics; it is conducted with the aim of developing the creative potential and creativity of students, designing their motivation and life experience, creative approaches to problems solving, ensuring balance between cognitive and affective personality development.

Use of knowledge in innovative conditions means for the student that he can gain knowledge and use it in the situations outside the textbook or lecture. However, given the A. Goralski statement that what is creative is new and valuable, that is to act creatively means to set a goal and get new and valuable product, from the student’s perspective each solving of the so–called “creative” problem is exactly the process we talk about. Natural sciences teaching methodology determines different ways of logic thinking development, but there are no described strategies of right hemisphere thinking development, of teaching based on images. Let us consider some ways of solving this issue concerning problem solving in physics in secondary, of general education establishments (an attempt of didactic creative work theory application in the process of physics studies). The physics didactics does not outline the teacher’s work system for skills designing to solve problems by the pupils. They do not study methods of solving problems, but intend to solve them by “try and error” methods seeking to find relevant formula that leads to the answer. Such behaviour according to A. Goralski is the conatus, or the intention to do something at the spur of the moment, this being an absolutely ineffective method of problem solving. The methods in general
are characterized by the space of solving problem methods, namely: a set of algorithm methods, conatus, or a set of conatus methods, among them heuristic methods space is being distinguished (Goralski, 1998, p. 23). The necessity to engrain heuristic thinking skills together with logic thinking habits is the main thought of D. Poya’s works. “Thinking can be called productive if it leads to concrete problem solving, thinking can be called creative if it creates methods for future problems solving. The more the number and the wider the variety of problems to which the created strategies are applied, the higher the level of creative thinking is” (Poya, 1976, p. 274). It is implemented by him via didactics through the detailed system of stereotyped instructions (bits of advice – recommendations or questions) with the help of which the teacher can appropriately direct student’s efforts that in turn facilitate developing his/her learning independence. D. Poya’s methods can be applied to teaching physics problems solving. “…the art of solving problems gives us a chance to create certain kind of mind in students and engrain certain notions that are a general education critical component” (Poya, 1976, p. 315).

Let us address once more the issue of problem solving methods space. The algorithm trains to act according to the pattern and it is “characterized by certain effectiveness and narrow specialization” (Goralski, 2002, p. 23). However, if spaces that embrace algorithmic and heuristic methods touch one another, we can consider their interdependence. The algorithm application demands specification of knowledge concrete definition, knowledge transfer to the similar or new situation and this teaches the student to study. Thus this is not a mechanic process, it needs thinking. Our knowledge about peculiarities of mental activity of the person who is solving the problem is still insufficient. Technologically, solving problem process can be considered as creative activity training, the elements of which can be used while studying physics, for example:

- “Let us observe the diversity of the world” – the need of performing the exercises of this type is caused, “on the one hand, by the necessity to break the stereotypes of teaching situations perception having been formed during our studies (at high school or higher school) and during solving standard life problems, and, on the other hand, by the necessity to think freely, notice plurality and integrity, likeness and difference; behaviour and activity schemes (well noticeable and less visible), variety of ways leading to the aim as well as versatility of actions and its results” (Goralski, 1998, p. 24). Such element of creative work training gives a possibility to develop right hemisphere thinking.

- Another element of training – “try something different”. The task may lie in using the same measuring devices for finding different physical values or vice versa – different physical devices for measuring the same physical value. For example, in what way can you use a barometer for height measuring above the Earth? One can do it via the pressures difference or one can throw it from a certain height and take into account time of falling.

- One more element – pro and contra. The exercise is the tool of distancing from himself/herself by means of very radical procedure. For its fulfilment the group of pupils is divided into two parts: one group takes part in defence, another group is opposing during the theme discussion. This exercise can be successfully used in class as a didactic play.

- A little bit of imagination – “this exercise is meant to develop imagination that is never too much” (Goralski, 1998, p. 30). This can be attained by the ‘broken” physical experiment. In the process of experiment demonstration the teacher takes a pause and proposes the pupils to predict its continuation or the experiment results.

Aiming at creative thinking formation it is necessary to begin from the simplest thinking actions and habits. In teaching physics there are mostly used instructions of the algorithmic type rather than algorithms. The system of such instructions does not regulate all the actions in a tough way. Some of them determine general trends of problem solving plan search and give space for self–guided activity. The algorithmic method prepares pupils for creative problems solving due to the fact that in such a way there are formed thinking actions and habits which in future the pupil will carry out automatically moving from solving typical problems to solving creative ones. The teacher uses models of creative work; in the ideal situations he/she creates them himself/herself taking into account individual possibilities of pupils and predicting possible spheres of their
interests. For the theme study the teacher chooses some really important problems connected with everyday life experience, predicting that they will cause interest on the part of pupils (students). He/she discusses the problem condition very succinctly and slowly. The teacher helps the pupils (students) ask questions or formulate the questions to be asked by the students. The teacher does her best to change the stereotyped vision of the world. In the ideal situations the pupils (students) solve the problems on their own. In such a way the problem becomes a typical example, the pattern for the whole branch of science. This reflects “the ideas of paradigmatic teaching – the teaching in accordance with patterns” (Poya, 1976, p. 314). In the system ‘teacher – pupil” a constant dialogue is taking place. There is required the basic knowledge that has been created in the process of theory learning and by algorithmic methods. The teacher starts with simple problems. The question exchange is welcome. What process or phenomenon is considered in the problem? What functional dependencies exist between the unknown and other data? Do we know appropriate formula? Are all other physical values but the unknown the data? If not, then how they are functionally connected within the addressed laws and phenomena? Can we write down an equation or a system of equations? It is worth mentioning that a general model of solving, an invariant one, is present in transition to solving of every subsequent class of problems. The variation model, on the contrary, is a model of questions and instructions of the teacher in the obligatory dialogue teacher – pupil, for example: Did you solve such or similar problems before? Is it possible to find the unknown from the equations? Are all data used in equations? Have all the essential notions incorporated in the problem been used? What additional equations can be used to find the unknown? What alternative methods can be used to solve the problem? Is it possible to solve this class of problems differently? What is the best method? Could it be possible to use this method of solution for other problems? What elements of solution can be used for other problems of this class? The algorithm should not be overly imposed on the pupils. A certain type of algorithm proposed by the teacher is discussed as to its use for solving one–two problems. Having understood the general logic of thinking the pupils (students) perform every operation consciously. But the range of problems is very big and it is impossible to design teaching algorithms for all types of problems. That is why a teacher can use a set of algorithmic heuristic methods.

CONCLUSIONS

Thus the basic provisions of the modern theory of creativity in the version of the creativity researcher A. Goralski have been considered. Taking into account the main psychophysiological (cognitive) assumptions there have been outlined the ways of implementing forms and methods of teaching creativity, with teaching physics being taken as an example. Further research, as well as arrangement of the system of problems and questions, can be directed to creation of new teaching technology being qualitatively different from the traditional methodology and directed towards forming the creative personality. The system of preparatory tasks makes it possible to generate creativity and teach creativity by solving physical problems, despite the fact that the novelty of the product can be subjective, relative, and significant only for the person who creates.

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THE IMPACT OF EXTERNAL FACTORS ON THE QUALITY OF HIGHER EDUCATION IN UKRAINE

ABSTRACT

The article presents the results of analyzing the effect of external factors on the development and quality of higher education in Ukraine. Among them the authors differentiate quality secondary education, well organized vocational guidance at schools, effective system of selection and admission of school leavers, prediction of the need for certain specialties, providing autonomy for universities and effective work of the National Agency for Quality Assurance in Higher Education.

Various definitions of the concept of “higher education” are presented and analyzed. The authors consider the reasons of low competencies of higher schools applicants in almost all secondary school subjects and as a consequence the challenges facing the teachers of higher educational institutions in training high-quality specialists. It is emphasized that most universities and institutes are to take the responsibility for the quality of education. This will enable them to be internationally competitive.

Keywords: higher education, quality higher education, external effects on the quality of education, higher educational institutions.

INTRODUCTION

The quality of higher education is one of the important main claims of the Bologna process declaration. Having joined the system of the Bologna process in 2005, Ukraine committed achieving the high quality of higher education. 10 years have passed since Ukraine joined the Bologna process, but we cannot say that our society is satisfied with the quality of higher education and higher schools graduates.

Adequate secondary education, the proper system of students’ admission to higher educational institutions and their predictive licensing, effective vocational guidance, the total autonomy of educational establishments, the productive functioning of the National Agency for Quality Assurance in Higher Education that controls the quality of higher education have the great impact on the Ukrainian educational system.

While establishing the problem, V. Kremen points out that “it is necessary to recognize the fact that development of the national educational system of Ukraine is not conducted in an
appropriate way. There is no correspondence between the quality of higher education and the number of higher educational establishments” (Kremen, 2014, p. 6).

The number of higher educational establishments has increased in nearly four times during the last 25 years. Nowadays in Ukraine there are 800 higher educational establishments, including 317 universities. In comparison, in most European countries there is only one university for a million of population. There is obviously a contradiction between reduction of the number of graduates from higher schools of Ukraine and a great number of higher educational establishments in the country.

It is essential that management of educational institutions aim at admitting students to licensed places. This is the reason for financial support, the workload of teachers’ staff and prestige of universities. Ministry of Education and Science of Ukraine helps them in this by stating low passing grades (points) of External Testing. As a result, more than 80% of school leavers enter higher educational institutions. Thus the principle that only 2 – 3% of gifted children are born and there are 16% – 18% of talented children who can successfully become students is violated.

This year faculties of physics and mathematics of pedagogical universities admitted school leavers with passing points 100,11 – 100,40 in Mathematics and 100,85 – 100,40 in Physics. At these faculties, it has become impossible to teach Mathematics to students who have insufficient knowledge of elementary Mathematics. Evidently, those students will not be excluded through failure. State demand for specialists in the field of mathematics this year was 619, but only 457 students were admitted. There is also a lack of students at the faculties of physics at pedagogical institutes. So the problem of quality in higher education is extremely relevant because it is an integral part of our future.

THE AIM OF THE STUDY

The aim of the research is to identify reasons of Ukrainian higher educational establishments lagging behind their European counterparts. We will analyse the external influence on the Ukrainian system of higher education and its quality. The authors investigate factors that are set by appropriate Laws of Ukraine and other regulatory and legal acts. Our purpose is also to deepen the concept (the quality in higher education) and identify its main components at the macro level. And it is important to consider the contradictions that arise as a result of inefficient management of educational institutions.

THEORETICAL FRAMEWORK AND RESEARCH METHODS

A great number of scholars such as V. Kremen, V. Bakhirushyn, K. Levkivskyi, A. Nikolayevska, L. Kaydalova, L. Shevchenko, Yu. Zhurovskyi and others investigated the problem of the quality of education in higher educational establishments.

RESULTS

V. Kremen deeply examines the quality education in new conditions. He emphasizes “traditional system of education that attempts to give a person proper knowledge of a subject for the whole life is to yield education that forms personal, fundamental competency (it is the ability to learn during the life). Besides that main principles of the quality in education are the following: to effectively inculcate progressive and promising values; to consider essential, individual characteristics; to reveal and develop talents and inclinations of every child; to form independence and self-sufficiency of a person; to educate innovative personality who is apt to perception and change creation. The considerable notion of quality in education is the openness to self-improvement, continuous modernization, and innovation” (Kremen, 2014, p. 5).

The concepts “higher education” and “the quality of higher education” are defined in the new Law of Ukraine “On Higher Education”. In particular, higher education is a set of systematized knowledge, practical skills, ways of thinking, and professional, ideological competences. They are acquired during the process of studying for obtaining certain qualification at different levels of higher education. In other words, the quality of higher education is the level of knowledge and skills obtained by a person that represents its competence according to educational standards (Law of Ukraine on Higher Education).
It is obvious that the concept “higher education” is too vague and incomplete. Regardless of a profession a modern specialist should possess foreign language communicative skills and computer competencies.

Briefly defining the concept of “higher education”, it is advisable to identify it as professional competence (practical skills and experience, value orientations such as respectful attitude to oneself, the family, the motherland, culture, state symbols, church, God…). Taking these into consideration we can define “higher education” as a set of the formed professional competencies for a certain qualification; obtaining computer and foreign language competencies, which imply a lifelong learning, perception and creation of innovative changes, and the result of optimal and intellectual personality development.

It is incorrect to define the quality of higher education as a level of acquired knowledge, skills, and other competencies. Each professional competence consists of theoretical and practical skills. Summing up, “the quality of higher education” is a satisfactory, good, excellent level of professional competencies regarding higher educational standards gained by a person.

In pedagogical studies such researchers as K. Levkivskyi and Yu. Sukharnikov endeavor to investigate the quality of higher education. They point out: “while developing the quality programs in educational institutions one should note that an integration of quality education with progressive properties of a specialist is determined by such factors: quality management of educational system and professional training; efficient policy in admission of students; effectiveness of didactic concept of higher education; integration of content and structure of educational curriculum according to students’ characteristics (health, intellectual development, professionally important qualities); well prepared scientific and pedagogical staff; correct policy in the assessment of students; quality of higher educational infrastructure; quality of external factors concerning higher education; compliance of the actual students’ workload with legal requirements (Levkivskyi & Sukharnikov, 2004, p. 89).

Nowadays most universities and institutes are to take the responsibility for the quality of education. This will enable them to be internationally competitive.

K. Levkivskyi and Yu. Sukharnikov name all the factors that have the impact on the quality of the specialists’ training process. We have a try to complement and concretize them. In our opinion the qualitative higher education is impossible without qualitative secondary education. The results of External Independent Testing in 2016 demonstrate the low level of secondary education (44.3 % of school leavers passed tests in the Ukrainian language at elementary and pre–intermediate levels, such results being in History of Ukraine and Mathematics – 65% and 54.5 %, respectively) (Ofitsiynyi zvit, 2016).

In our opinion, reasons for the low quality of secondary education are the following: pupils of graduation classes very often do not attend classes in the second semester, whereas many of them have courses and practical training with tutors. As a result, pupils miss school classes on generalization and systematization at the end of an academic year; a great number of subjects that pupils have to study (optional part of the curriculum consists of 17–22 subjects); lack of curriculums and manuals for optional subjects; low quality of pre–profile orientation of curriculum in the secondary base classes and profiled (specialized) education. As a result, teachers of higher educational establishments have to spend a lot of time to generalize skills and reach professional level step by step; lack of a systematic reform of the educational system (a large number of ungraded secondary schools); inadequate school funding and low salaries of teaching and support staff; low level of teachers’ professional training (students are admitted to pedagogical faculties with unsatisfactory level of general education); teachers do not use new effective, educational and computer technologies, very often because they are not available; management structure in education is outdated and characterized by bureaucratization and formalization; administrative culture is not of a proper quality (Laws of Ukraine “On Higher Education” and resolutions of Cabinet of Ministers are ignored at schools).

The first and main external component of high–quality education is highly qualified secondary schools. In order to provide the quality of higher education, we should use an adequate
system of selection and admission of students. Nowadays this problem aggravates contradictions between simplified procedure of students’ admission (low scores at External Testing, commercial form of education) and requirements of curriculums in higher educational establishments; poor quality of vocational guidance and students’ possibilities to enter several universities or institutes; various levels of school leavers’ preparations (standard level, academic level and profiled level) and teaching of students according to curriculum in heterogeneous groups (Sikorskyi, 2014).

The introduction of External Testing and admission to higher educational establishments helps to clear educational system from bribery. As it was noted earlier too many universities and institutes prompt Ministry of Education and Science of Ukraine to lower significantly passing scores. Consequently, many students without thorough knowledge and intellectual abilities are admitted. The only way out of this situation is after the first session to expel all the students that cannot cope with the scientific curriculum and pass successfully credits and exams.

Another external component for providing high–quality education is training of professional in specialties that are required by the labor market. Nowadays the labor market is saturated with lawyers. Some of them register in the Employment Centre, others train for a new profession such as a builder, a seller. Such uncertainty in future employment is not a contributive factor for the qualified process of learning. It is difficult to predict the necessity of certain specialists. Actually, there are no vacant employment places for teachers of English, Biology, Ukrainian, History, but there is nobody to fill vacancies of teachers of Mathematics and Physics at schools.

Vocational guidance at schools is an equally important method of achieving high quality of education. Management of schools and teachers neglect this fact. They do not teach how to take into account physical and psychological characteristics of secondary school leavers when they choose a future profession, pay no attention to professiongrams. The problem is that school leavers very often choose higher educational establishments by intuition and parents’ or friends’ advice. Such actions do not give effective results.

Another important fact in providing high quality higher education is the autonomy of higher educational establishments. It stimulates them to be more responsible for their results in the process of teaching. The autonomy of universities and institutes must be held in a legislative way.

Many European universities direct their autonomy towards the following: formation of vocational guidance by introducing flexible systems of teaching trajectory; establishment of master’s and doctoral programs, their directions and specializations; independent determination of content of curriculum; all scientific degrees and titles are to be awarded with appropriate diplomas; presentation of diplomas of own models; recognition of diplomas and degrees of foreign universities and institutes (Master degree, Doctor of Philosophy, Associated Professor and Professor); decision–making on giving the same status to foreign teachers with appropriate employment position and payment; autonomous determination of subjects, which students passed abroad to their own curriculum according to specialty; correspondence between learning experience and results obtained within informal process of learning (Ensuring the quality of higher education, 2014).

Our higher educational establishments (universities and institutes) are far away from obtaining the autonomy. It is necessary to credit the autonomy.

Finally, one more external factor is the monitoring of high–quality education by an agency which is independent of Ministry of Education and Science of Ukraine. According to the law of Ukraine “On Higher Education”, there was established the National Agency for Quality Assurance in Higher Education. This agency is formed to perform regulatory and controlling functions.

Cabinet of Ministers of Ukraine approved the personal staff of the National Agency for Quality Assurance of Higher Education on July, 27. This agency is in the authority to do the following: to form the requirements for quality assurance systems of higher education; to develop regulations and accreditations of educational programs and submit them for approval to Ministry of Education and Science of Ukraine; to analyze the quality of education provided by academies, institutes and universities; to conduct license examination, organize an opinion on the possibility of issuing the license for educational activity; to form a list of specialties in which candidates can be
trained at appropriate levels of higher education; to create a single database for implementation of specialization at each level of higher education; to accredit educational programs; to form the evaluation criteria of the quality of higher education (it is easy to determine ratings of universities); to develop requirements for academic qualifications of people who acquire degrees, to develop a procedure for their award by the Specialized Scientific Councils; to accredit specialized Scientific Councils and control their activities; to accredit independent evaluation institutions and quality assurance of higher education; to realize plenary powers predicted by the law (Levkivskyi & Sukharnikov, 2004).

As the agency has just started its work, it is difficult to predict how it will affect and improve the quality of higher education.

CONCLUSIONS

So the quality of higher education heavily depends on external factors. Among them we differentiate quality secondary education, well organized vocational guidance at schools, effective system of selection and admission of school leavers to higher educational institutions, prediction of the need for certain specialties in the national economy, provision of autonomy to universities and effective work of the National Agency for Quality Assurance in Higher Education.

Well-qualified teaching staff, proper material and technical database, curriculums, scientific plans and programs, appropriate teaching materials are also of importance but they will be dealt with in our further research.

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PEDAGOGY FOR ADULTS
BY JANUSZ KORCZAK AND VASYL SUKHOMLYNSKYI

ABSTRACT
The article deals with the pedagogy for adults by Janusz Korczak and Vasyl Sukhomlynskyi. The author has defined the following objectives: to conduct the analysis of scientific and pedagogical literature which highlights different aspects of the problem under research, and present the results of comparative analysis of the concepts of family education of Janusz Korczak and Vasyl Sukhomlynskyi, as well as outcomes of their common provisions and individual features of each of them. The issue of forming the personality which arises from the pedagogical conception of Janusz Korczak is examined in the article in accordance with the conception of good by Vasyl Oleksandrovych Sukhomlynskyi. On the basis of the comparative analysis of the main principles of the pedagogues’ creative heritage the conclusion is drawn that good is taken as the basis of both conceptions concerning education of personality. In the article the principles of an individual trajectory of forming the personality are singled out and the conditions which the educators should reasonably follow in the broad understanding of the word for its realisation in everyday life are specified.

Keywords: “pedagogy of good”, personality forming, Janusz Korczak, Vasyl Sukhomlynskyi, an individual trajectory of education, mutual respect.

INTRODUCTION
In modern Ukrainian society education of a personality must be directed to the development of a patriot, a citizen, a nationally conscious person, a person who could successfully adapt to complicated social processes and find a personal identity as soon as possible. At this, it is necessary to consider democratic values worldwide. Besides, in the process of educating young people it is necessary to constantly consider their individual characteristics, abilities and inclinations, without burdening them with things which hinder the development of their personal advantages, to move away from the constant clichés in the educational process and cut off unnecessary things which traditionally enslave the educational system and prevent the comprehensive development of children and youth.

All this demands changes not only in the content of education, modernization of the structural components of this process, the improvement of relationships between its participants, but also the modification of the whole concept of education, i.e. building it on the strictly defined psychological basis, considering children’s abilities, when the focus of children’s education is on their interests, on the respect to a child’s rights, which excludes distrust, dislike etc. These very components are inherent to the conceptions of education of Polish pedagogue Janusz Korczak and Ukrainian pedagogue Vasyl Sukhomlynskyi.

THE AIM OF THE STUDY
The aim of the article is to explore the pedagogy for adults by Janusz Korczak and Vasyl Sukhomlynskyi. The author has defined the following objectives: to analyse the scientific and pedagogical literature, which highlights different aspects of the problem under research, and to make a comparative analysis of the concepts of family education of Janusz Korczak and Vasyl Sukhomlynskyi and find out their common provisions as well as individual features of each of them.

THEORETICAL FRAMEWORK AND RESEARCH METHODS
Based on the comparative analysis of the main principles of the pedagogues’ creative heritage the conclusion was drawn that every concept of upbringing the personality is based on the
principle of “good”. There were also singled out the principles of an individual trajectory of forming the personality. The conditions which the educators should reasonably follow in general to realise these principles in everyday life were substantiated.

Many research works are devoted to the pedagogical inheritance of Janusz Korczak and Vasyl Sukhomlynskyi. They mostly deal with separate aspects of their theoretical and practical searches. The following researchers investigated the following issues of pedagogical inheritance of V. Sukhomlynskyi: education of child’s needs (A. Bogush, N. Dichek, I. Shorobura), development of cognitive needs of schoolchildren (V. Kuzmenko, N. Mtelmakh, O. Savchenko, N. Skrypnyk), realization of different directions of education (I. Maisterchuk, L. Mikhailova, O. Strebna, I. Yashchuk and others), development of family pedagogy (L. Zalitok, S. Lytvynenko, N. Slyusarenko, O. Sokolovska, V. Fedyayevo), paternal pedagogy (T. Zavgorodnya), pedagogy of good (O. Bilyuk, A. Bohush, L. Bondar). The works of A. Didenko, M. Chepil are devoted to the problems of humane pedagogy of Janusz Korczak. The works of comparative character analysing the pedagogical ideas of Vasyl Sukhomlynskyi and domestic (O. Adamenko, L. Berezivska, O. Bilyuk, T. Zavgorodnya, A. Zahorodnya, N. Pobirchenko, M. Smetanskyi and others) as well as foreign (S. Belova, T. Kravcova, V. Metel) pedagogues also deserve attention. However, there is practically no research of comparative character devoted to the works of Vasyl Sukhomlynskyi and Janusz Korczak.

The content of pedagogical conceptions of Janusz Korczak and Vasyl Sukhomlynskyi can be expressed by one phrase from one of his works “The Rules of Life”: “… I respect equally old people, young people and small children.” The respect to children as to grown-ups and the necessity of subject-subject relations between adults and children are evidenced in the clarification of the title of the above-mentioned book, it being “Pedagogy for children and adults”.

In general, the analysis of psychological and educational achievements of the pedagogue gives reason to believe that he supported the idea of the need for continuous preparation of adults to the education of a child. However, he stressed the need to reorient this process to the formation of each of them as the person with high general culture and universal values, not only the one capable of transferring and replenishing knowledge.

The basic positions of Janusz Korczak’s education conception for adults were covered in numerous publications. They include such major works as “Educational Moments” (1919), “The Child’s Right to Respect” (1929), “Rules of Life” (1930), “Humorous Pedagogy” (1939), “Selected Works” (1966) “Selected Educational Works” (1979), “How to Love a Child” (1990). The information from his diary complements the main concepts. In addition, J. Korczak wrote many works for children, whose content today makes it possible to realise in practice the basic ideas of the pedagogy of good, sensitivity, respect for the child, perception of him as what he really is. Generally, creative achievements of the man, who combined the profession of a physician, a social activist, the head of educational child care centres (children's summer colonies, orphanages), are in themselves a textbook in pedagogy for adults, both for educators and parents.

All the works of the pedagogue are permeated with attempts of finding the ways to form tolerance, non-aggressiveness, tact, compassion, mutual respect, friendliness, responsiveness of the members of the educational process. In his book “The Rules of Life”, the pedagogue explains that a tactful person is the one who “knows how to approach people. With his heart or mind, he knows what they need, and willingly offers his help. Being careful, he does not insist on his own ideas, dealing with adults; he does not boast nor mock without touching sad things with funny jokes; he never tries to give advice when he is not asked to and does not talk excessively, he is not angry and he tries to justify and protect. If he isn’t needed – he is absent; if he can be useful – he is right there” (Kovalenko, 2002, p. 35).

To develop in a child such moral trait as tact, Janusz Korczak distinguishes tasks that are to be performed by adults, including:

− to teach children constantly provide services to others, correct one’s own mistakes, remember good and useful things; though this should not imply long conversations from adults;
− to develop the ability to lose with dignity and fairly evaluate the merits of the enemy;
− to form in children the need for self-education on the basis of self-esteem, self-criticism etc.;
− to teach “to be able to sympathise with the good, bad, people, animals, even the stones and broken trees”;
− to develop feelings of the child, because, as Janusz Korczak noticed, “if you do not know how to use your feelings, they weaken, as they say, they get blunted” (Kovalenko, 2002, p. 27) and others.

At the same time, the teacher gives the following tips for adults on the given subject, which were published in the aforementioned book:
− to know “the rules of the street” and take them into account in educational work;
− to require from the children kindness, but not sacrifice;
− not to act by force;
− when making decisions, giving advice, one must comprehensively examine the situation, the reasons which have led to it, make a pause to think it over;
− requiring from children to be polite and gracious with adults, adults should be polite themselves and make no trouble;
− to avoid creating situations which cause the manifestation of fear in children. “The fear that something might happen disturbs the peace of joy” (Kovalenko, 2002, p. 12);
− to take into account the child’s individual and age characteristics;
− to teach children to observe the rules of the game “for which a good friend and inspiration, i.e. freedom, are needed”. These rules were composed by him: “1. Do not interfere with the play, this is not less important here than it is in education. 2. One cannot take someone else’s ball, box, stick without the permission. 3. If you do not want to play, if you do not like it, move aside and do not play ...” (Kovalenko, 2002, p. 119);
− not to be angry with children, because “this does not correct, but spoils the child” and others (Kovalenko, 2002).

These statements of pedagogy for adults by Janusz Korczak are consonant with the basic concepts of pedagogy of good of the Ukrainian teacher Vasyl Oleksandrovych Sukhomlynskyi. This is easy to explain by the life trajectories of these great men (although one of them was a doctor, and the other – a teacher) who had a lot in common. Thus, each of them worked as a director of various types of educational institutions, each has developed his own concept of education, which found justification in numerous publications, and each realized his vision in practice, taught at teacher training institutions. Vasyl Sukhomlynskyi, considering the problems of education of mainly secondary school students, paid considerable attention, as well as Janusz Korczak, to the training of adults to organize this process. And he also put in the first place the need to prepare the child for the life in the society, his many-sided education, the ability to combine the given freedom with the personal responsibility and more. V. Sukhomlynskyi emphasized that the frames of social, professional, public activities of a person are extended with the age, and during his life a person has to solve a lot of problems, contradictions and even conflicts, respecting existing laws. And children should be prepared for this.

According to V.O. Sukhomlynskyi, “already in the 7–8th forms there start to emerge disputes among peers on such philosophical and moral issues as possibility of the world cognition, freedom of the human personality and his duty in the community, resilience and courage of a man ...” etc. (Sukhomlynskyi, 1977e, p. 298), which often lead to conflicts. He stressed that “Children's heart can be easily hurt ... The child is very sensitive to the good and the evil, the truth and the lie... It is peculiar for a child to have a very sensitive and emotional response to such things. The child is very attentive to injustice... Injustice is abusive, it affects self-esteem, it outrages the child, creates in her mind various forms of active and passive protest. The child of delicate, sensitive nature is oppressed and struck by indifference” (Sukhomlynskyi, 1977f, p. 492). And this often causes conflicts too. According to the pedagogue, “If children feel they are treated indifferently or unfairly, they lose their sensitivity to good and evil” (Sukhomlynskyi, 1977a, p. 292). Observing educational work, V.O. Sukhomlynskyi looked with particular attention to conflicts, which, if not prevented, “corrode
school life, like rust” (Sukhomlynskyi, 1977i, p. 628). In his view “the conflict between a teacher and a child, between a teacher and the school staff is a great misfortune of the school” (Sukhomlynskyi, 1977i, p. 629). The teacher describes his own feeling about the emerging conflicts: “I was ashamed of myself for the conflicts that I happened to experience... How little I felt and understood the soul of the child in those moments! How should we cherish children’s trust, what a wise, loving protector of the child an educator must be, so that between him and the children there always were harmony of friendly, cordial relations” (Sukhomlynskyi, 1977i, p. 619). He therefore advocated a “conflict–free education”. The pedagogue stated: “Yes, I am for raising children (exactly children) without shocks and explosions, without strong instruments of influence that don’t make any good. It is impossible to transfer concepts and patterns in children’s world form “adult” sociology” (Sukhomlynskyi, 1977g, p. 626).

According to the pedagogue’s opinion, “the conflict between a teacher and a child is one of the most extreme manifestations of pedagogical illiteracy. This phenomenon takes place, where educators lack generous parental, maternal wisdom, great educational authority, understanding that he is dealing with children’s actions, with the children’s world views and perspectives; a child must not be confused with an adult, there is no single measure, which could measure both an adult and a child” (Sukhomlynskyi, 1977g, p. 641). Thus, in his view, “real education is not when the teacher gets down from the peak to the ground, but where he rises to subtle truths of Childhood” (Sukhomlynskyi, 1977g, p. 642).

To help implement “conflict-free education” into the practical activities of educational institutions, O. Sukhomlynskyi finds and offers ways to achieve this goal actually in all his works. In particular, this is vividly reflected in the following scientific works: “Education without Punishment”, “The Methods of Training Teachers’ Staff”, “Award for Good”, “The Birth of a Citizen”, “The Birth of Good”, “Do not Be Afraid to Be Gentle”, “Pavlyska High School”, “A Conversation with a Young Director”, “One Hundred Tips for a Teacher”, “How To Raise a Real Human” and others.

RESULTS

Summing up the achievements of the pedagogue concerning problems of “conflict-free education” we singled out the main ways of preventing conflicts, which sometimes arise in the teaching process at educational institutions. These are:

− developing friendly mutual help, desire for mutual support and assistance, arising the feeling of anxiety for the fate of a friend, his study and accepting his grief as the grief of the entire team (Sukhomlynskyi, 1977e, p. 83);
− encouraging the actions that include direct attitude to people, to himself, to the public interests on the basis of which there are formed the moral beliefs related to the respect for the people’s rights (Sukhomlynskyi, 1977e, p. 158–159). (In order to solve this problem in Pavlyska School the requirements were developed to the things the children should be taught) (Sukhomlynskyi, 1977e, p. 159);
− implementing in practice “the degree of spiritual unity, at which the tutor and the pupil feel like-minded” (Sukhomlynskyi, 1977e, p. 434);
− no blaming a child for negative manifestations, which actually do not exist, because it repels the child from the teacher, the child loses confidence in him (Sukhomlynskyi, 1977g, p. 641);
− teaching children of every age kindness, humanity, warmth, indifference, compassion, tolerance, in short, love for people, which is the basis of patriotism;
− incorporating children at a young age – from 6 to 10 – “to the highest human joy – the joy of doing good things for others”. The pedagogue called education at this age “natural school of kindness”... “Only this”, says V.O. Sukhomlynskyi, “truly selfless and so truly human experience is the power that ennobles young heart” (Sukhomlynskyi, 1977c, p. 219);
− teaching children to feel others, so that one child would not wound the soul of the other (Sukhomlynskyi, 1977f, p. 493);
− developing children’s needs to do good for parents, tutors, in general, people of older generation, but “the highest award for the good, done for people, for the growing man must be the
voice of his conscience – joy, pleasure” (Sukhomlynskyi, 1977c, p. 219; Sukhomlynskyi, 1977d, p. 289);

− trying to make children love taking care of living beings and the beautiful, of the prosperous and the thriving... because “in such care there is the living source of human sensitivity, compassion” (Sukhomlynskyi, 1977c, p. 217–223);

− teaching teenagers to give emotional evaluation not only of good deeds but also of what is forbidden, unacceptable;

− encouraging children to merge joy of being in the spiritual life of the child with the respect to other people’s life, weaknesses of others. It is necessary to bring up from childhood the individual tolerance, i.e. children should be taught “to catch with their hearts the most delicate shades of the human spirit, to respond with their hearts to thoughts, emotions” (Sukhomlynskyi, 1977i, p. 636);

− instilling in a personality love for people and faith in them, because this is, by the figurative expression of Vasyl Sukhomlynskyi, “the air which supports the wings of grace and gentleness” (Sukhomlynskyi, 1977c, p. 358);

− educating with the use of examples of kindness, generosity, friendly and, at the same time, demanding relations between individuals in the team and the relationship between a man and the outside world;

− trying to gain desire in students to meet with their team-mates, to express their thoughts, doubts, anxieties, pursuit results, simply for communication, which would be “joy, luxury” for each person (Sukhomlynskyi, 1977i, p. 462).

But to effectively use these ways to prevent conflicts, the teacher must follow a number of requirements because, as Vasyl Oleksandrovych pointed, if a teacher has endless conflicts with children, he should not be an educator. So, to prevent arising conflicts, it is necessary to develop a lot of skills, realizing at first that you are dealing with children. Among these skills the pedagogue names:

− ability to reveal pedagogical tact in the educational work, respect for the individuality of a teenager, taking into account such contradictions of adolescence as contempt for selfishness, individualism and sensitive selfishness, which should be aimed at developing a healthy ambition, rigor and respect for themselves, by “strengthening in the teen soul what he is entitled to be proud of, what is regarded by society as moral dignity” (Sukhomlynskyi, 1977b, p. 334). At the same time the educator should be able to read the human soul. The disability to do so, according to V.O. Sukhomlynskyi, causes inevitable conflicts;

− ability to develop in teenagers, taking into consideration their pride, dignity and respect through the work of the school community, by way of teachers refusing to compare good – bad, to evaluate mental work of people with different abilities; to develop human relations of sensitivity of “a heart for good, for kindness, thoughtful attitude, mutual trust ...” etc. between a teacher and students (Sukhomlynskyi, 1977b, p. 451);

− reduction of the number of punishments and their severity to facilitate the development of self-education of students. The punishment, justice of which is questionable, according to the pedagogue’s opinion, “coarsens human soul, making it brutal... More than any other evil, we educators fear rudeness of a soul, moral thickness, resistance to good, beauty” (Korchak, 2012, p. 347);

− ability of the teacher to tactfully, gently, and softly remind the child what he is to do in life, what work and what duty, being united in the spiritual activities, will create his identity as a citizen, a worker, a thinker, a father, a man, showing “great sensitivity, tact, patience” (Sukhomlynskyi, 1977i, p. 287; Sukhomlynskyi, 1977i, p. 149–416);

− expression of boundless faith in man, in the good in him;

− tolerance for children’s weaknesses, which, if they are perceived not only through mind but also through heart, “are very small, being worth neither anger nor resentment, nor punishment” (Sukhomlynskyi, 1977g, p. 423)
− discovery in teachers their passions, inclinations to create a school atmosphere of the rich, multi–faceted spiritual life, being beneficial for activities of many class communities (Sukhomlynskyi, 1977f, p. 438);
− continuous study of a child, because “without the knowledge of all this it is impossible to teach or educate” (Sukhomlynskyi, 1977f, p. 442);
− ability to control oneself, pull oneself together, bringing flexibility “of the nervous system to the degree when the power over the emotions becomes a kind of art” by preventing “germination of seeds of such negative points as gloom, exaggeration of the vices of others, amplification of “abnormal ones” (Sukhomlynskyi, 1977g, p. 426), as well as possession of a sense of humour (Sukhomlynskyi, 1977g, p. 428);
− continuous self–improvement through thoughtful reading, “to master the art of touching young hearts” (Sukhomlynskyi, 1977g, p. 510);
− “maintenance of correlation of a moral principle and an action, to which the teacher encourages his pupil”. Introduction of “The Program of Moral Habits”, developed by V.O. Sukhomlynskyi jointly with the staff of the school, into the work of educational institutions, the success of the realization of which relies on the fact that the incentive to good behaviour “were the conscience and will of the teenagers themselves” (Sukhomlynskyi, 1977b, p. 455–456);
− deep respect to the personality in general and to the intimate world of teenagers;
− increase of the educational power of the community, which must “see in a person ten… a hundred times more merits than flaws and shortcomings”, and this requires closer work with each person, “gentle, humane touch to every heart...” (Sukhomlynskyi, 1977c, p. 358).

CONCLUSIONS

Thus, it has been determined that the foundation of the concepts of education of the personality by Janusz Korczak and Vasyl Sukhomlynskyi is “the pedagogy of good”, which presupposes teacher’s respect for human, positive vision of it, the ability to implement individual approach to everyone, to avoid conflicts, to compromise, to have communication skills, self–control and use in practice its main characteristics. The educators are also supposed to stick to the principles offered by pedagogues in implementing the individual trajectory of the personality development.

Further research may be dealing with such aspects of activities of Janusz Korczak and Vasyl Sukhomlynskyi as: preparations of adults to the organization of educational process of children of different age at general education school; socialisation of children; formation of the child’s ability to combine freedom with personal responsibility; development of the theory and practice of education without conflicts etc.

REFERENCES

INTEGRATION OF NATURAL SCIENCES CONTENT INTO PROFESSIONAL TRAINING OF FUTURE DOCTORS

ABSTRACT

The article deals with the problem of integration of natural sciences content into professional training of future doctors. The aim of the article is defined as methodological substantiation of the expediency of integration of natural sciences content into the professional training of future healthcare professionals. The authors define special features of natural sciences knowledge and of natural sciences training of a future doctor, special features of teaching natural sciences, and substantiate possibilities of integration of the content of the natural sciences component into professional training of future medical workers. The ways of integration of teaching natural sciences with professional practical training in the process of preparing medical specialists have been elaborated. It has been found that it is advisable to overcome inconsistency between separate academic disciplines by way of their integration while accounting the aspects of their self-organization. It has been established that integration of the aims of teaching natural sciences with professional training of future medical workers is based on the idea of purposefulness and motivation of teaching the fundamentals of these sciences.

Keywords: natural sciences training, natural science disciplines, doctors’ education, integration, professional practical training, professional competence, motivation, teaching content selection criteria.

INTRODUCTION

The growth of significance of integrative processes in the world generates a series of contradictions between the possibility of integration of the content of natural sciences disciplines as of a problem of general pedagogical scope and its place in the real practice of modern professional education; the tendency towards integration in professional training of specialists and insufficient level of development of the theory of integration as far as future medical workers’ training is concerned; objective unity of natural sciences training and professional practical training of future medical workers and their separation in the real teaching process.
To solve these contradictions, theoretical and methodological substantiation as well as the elaboration of the ways of integration of natural sciences training into the professional practical training of medical workers is required.  

The lack of attention towards integration of the natural sciences component into the content of training future doctors has a negative effect on their future practical activity. As practice shows, some medical workers have no sufficient knowledge of natural sciences; this doesn’t promote their professional growth and professional competence. It enforces the necessity of enhancement of the role of the natural sciences component in the system of education of medical specialists.  

Teaching of natural sciences in a higher professional school has the important tasks of creating firm grounds for special knowledge, mastering methods of scientific cognition, training for practical activities, forming intellectual skills, general intellectual development etc. As some studies prove, the low level of mastering natural disciplines is usually caused by the absence of interest and underestimation of their role in the process of forming special knowledge and skills, as interest in the object studied is directly related to the recognition of its value (Dolnikova, 2000).

**THE AIM OF THE STUDY**

The aim of the article is methodological substantiation of the expediency of integration of natural sciences content into the professional training of future healthcare professionals. According to the aim of the research the following objectives have been set: to define special features of natural sciences knowledge and of natural sciences training of a future doctor, special features of teaching natural sciences, and to substantiate possibilities of integration of the content of the natural sciences component into professional training of future medical workers.

**THEORETICAL FRAMEWORK AND RESEARCH METHODS**

The reformation of higher medical education in Ukraine is closely related to general scientific and pedagogical innovations concerning educational process optimization thus requiring the renovation of structural elements of the pedagogical system. Given the whole pedagogical process is covered, the formation of competence as the result of training a future specialist, e.g. a doctor, can be achieved. New approaches to solving this problem provide availability of profound knowledge and skills in medical and biological physics, medical chemistry, biochemistry, biology, etc., as natural sciences education is the basis for gaining a speciality.  

To overcome inconsistency of separate disciplines one should practice their integration keeping in mind self–organisational aspects. By now a great experience of integrating various subjects has been accumulated, and stages of moving from local, partial integration to the creation of integrated syllabus have been charted. The integration of objectives of natural sciences education and professional training of medical workers is based on the idea of purposefulness and motivation of teaching the fundamentals of these subjects in higher medical institutions.  

The main task of such training in conditions of a new paradigm of higher medical education is to turn it into an effective means of professional activity, providing its correspondence to the demands of modern medical workers. Being based on general pedagogical regularities, integration of students’ professional and natural sciences knowledge has to take into consideration not only peculiarities of a definite branch – medicine, but also of the disciplines indispensable for a complete professional education.  

The article presents the methodological rationale for integrating the content of natural science education in the training of future doctors in the context of improving the quality of their future professional activities.

In modern pedagogy, a great amount of research into the problem of integration has been accumulated (V. Bezrukova, F. Belyayeva, S. Honcharenko, R. Hurevych, I. Kozlovska, D. Kolomiyets, O. Sergeyev, V. Sydorenko, M. Chapayev etc.). The question of integrative processes in the natural sciences education is in the centre of investigation in a number of scientific works (M. Hapontseva, K. Huz, O. Danylyuk, V. Zavyalov, V. Ilchenko, O. Levchuk, L. Rybalko, A. Stepanyuk, V. Fedorova, O. Yavoruk etc.). The issue of training future doctors has been researched (L. Bykov, L. Borysov, I. Bulakh, H. Lerner, M. Mruga), in particular, the issue of teaching natural sciences disciplines in the process of training future medical workers.
(A. Bekrenyev, A. Hladun, L. Dolnikova, Ya. Kmit, N. Stuchynska, T. Temerivska, etc.) has been investigated. These works have influenced the establishment of an integrative approach in professional education, medical education, in particular.

At the same time, theoretical analysis of scientific works and practical experience have revealed that the issue of integration of natural sciences training of future medical workers has not been the subject of special research yet.

RESULTS

Natural sciences knowledge has two special features:

1) more developed mathematical apparatus of relevant theories as well as methods and means of experimental research aimed at developing methods of solving problems with direct access to practice;

2) specific ideological component that is based on general and more visual picture of the nature that contributes to the man’s understanding of the world and of the place he occupies in it.

Thus, “we can speak about the scientific outlook and scientific picture of the world, not opposing them to humanitarian–oriented mythological, religious, metaphysical and philosophical outlook which now has a tendency of integrating with the natural scientific outlook” (Granatov & Plugina, 2006, p. 51). Specific features of natural scientific culture consist in the facts that, first and foremost, knowledge about the nature is constantly improving in logical and notional aspects and is characterized by a high level of mathematisation and objectivity, presents the most authentic layer of human knowledge, being very important for the existence of a man and the society. Besides, this knowledge is deeply specialized. In any case, for a man in general, natural scientific culture is the most important means of socialisation and the grounds for his forming a general “picture of the world and a man’s place in it”.

Knowledge integration is provided by pass–through relations between notions and terms, theories, and regularities, and the content is filled with statements about conservation of the biosphere’s stability, about living organisms’ origin unity, genetic and historical unity of nature and society cognition and nature integrity at all levels of organization of everything alive (Paykush, 2011). It enables substantiation of elements of knowledge about the nature on the basis of common, uniform components of nature (the laws of conservation, periodicity, processes orientation), this being the necessary condition for students’ understanding of nature’s integrity. Understanding occurs when an unknown item, the object (of new knowledge) is included into a unity, the system of understandable things. General nature regularities are a pass–through means of integrating knowledge of natural sciences into professional training of future medical workers (Rybalenko, 2011, p. 42).

When scientific activity is intensified, attention to the problems of science integration is enforced, especially to the problems of interaction of natural, technical, humanitarian (“humanization of education”), social and economic sciences. Revealing the material unity of the world is no longer a privilege of physics and philosophy; social, economic and technical sciences got actively involved in this process. The material unity of the world in the fields where the man transforms nature cannot be disclosed only by natural sciences because the society interacting with it is also the matter of the highest level of development. Technical sciences which reflect the laws of motion of material means of human activity and which are the link connecting the man and nature, also testify of the materiality of human activity means that are used to discover and transform the nature. Now it is possible to claim that substantiation of the material unity of the world has turned to be the matter of not only philosophy and natural studies but of the science as a whole, it has turned into the task of general scientific character that requires enforcement of interaction and integration of the above–listed sciences.

The integration of natural sciences education means usage of central general scientific principles and methods through the whole process of teaching. The principle of subsidiarity, the principle of appropriateness, the principle of symmetry, the method of modelling and mathematical methods are the most important for the integration of natural and scientific disciplines. Integration of these sciences will let reveal the fundamental unity of “nature – man – society” in the process of teaching, will increase students’ interest in learning this cycle of disciplines, will provide an
opportunity to intensify the educational process and ensure high quality of its results (Krasnobokyi, 2003).

The results of the teaching activity analysis justify it’s being a kind of cognitive learning process and its grounding on regularities common to scientific cognition and, thus, having common resemblance in structure, methods and ways of thinking. In particular, the theory and methodology of learning natural sciences subjects have a number of fundamental works, which have elaborated a concept of teaching that has a modern method of scientific cognition as its philosophic fundamentals. The didactic content of the concept implies that despite all the differences between scientific and teaching cognition, in both cases the process follows the general scheme of scientific learning. In practice, this concept is realized at the level of structuring teaching material content, while the activity aspect of the problem is barely reviewed (Galatyuk, 2012).

Basic knowledge of natural sciences is the grounds for learning clinical disciplines and an essential component of professional training of future doctors. Numerous significant discoveries in modern biology were made on the basis of good knowledge and application of the laws of chemistry, physics, and mathematics (Bykova, 1986). These subjects ought to become components for the development of horizontal integration.

In conditions of higher medical education reformation, it is important that from the first year of studying students should have the possibility of understanding and feeling the practical meaning of every subject from the cycle of natural science disciplines that is studied and in this or that way “works” for the model of a specialist. Sometimes the students’ interest in learning a subject decreases if its value for clinic practice is not clear. At the same time, the interest grows if the student understands what he is learning in the fields of histology, biochemistry, pharmacology – disciplines being far from therapy, but in the course of teaching being strongly associated with the spirit of a clinic. Teaching any knowledge and skills at any theoretical department should be considered from the perspective of future practice.

In this relation they find extremely urgent the problem of integration of the educational content: both of the inner integration – for natural and scientific disciplines, and of the outer one – for natural, scientific and special disciplines in the course of training medical workers. Integration in education “is associated with such important problems as productivity, personal orientation, and nature appropriateness” (Rybalke, 2012, p. 105). At present training of medical specialists in natural sciences provides sufficient knowledge, skills, and abilities though it has not yet turned into an effective tool for professional activity. As practice shows, the absence or insufficient level of natural sciences knowledge by some doctors weakens their professional thinking thus lowering the effectiveness of the treating process and increasing the probability of a medical mistake.

The natural sciences content in the education of future doctors implies the existence of the scientifically grounded system of didactically and methodically substantiated teaching material, which contains natural sciences component in training medical specialists that we view as the result of acquiring selected knowledge, skills and values necessary for the successful fulfilment of professional activity.

Formation of the content of doctors’ training in natural sciences is done at several levels: selection of the teaching material with the purpose of detecting possibilities of integration within natural sciences education; structuring of the content based on the integrative approach and professional orientation towards medical knowledge and skills without breaking the logic of teaching appropriate disciplines; analysis of the possibilities of using synergetic approach to forming the content of natural sciences training; formation of the integrated synergetic system of the content of natural and sciences training of a future doctor in the context of competence approach.

Orientation towards natural and scientific knowledge means its restructuring according to the needs of doctors’ training that is the basis for developing the selection criteria of relevant teaching content, in particular: using modern achievements of natural and medical sciences; foreign and home experience in creating curricula; compliance of the complexity of the content and scope of natural sciences training with the real learning opportunities of students specializing in medicine;
scientific level and practical value of the teaching material in natural subjects for future doctors; taking into account general pedagogical and methodical possibilities for implementing the teaching material in the process of teaching and studying; optimization of the scope of natural sciences disciplines with regard to special features of professional training of future doctors.

Specifics of learning natural sciences disciplines in a higher medical educational institution lies in “the development of clinical thinking of future specialists in medicine that starts from studying such fundamental or natural sciences disciplines as normal anatomy and physiology, pathological anatomy and physiology, microbiology, medical genetics, pharmacology, the Latin language. In the process of these studies the main purposes imply the intensive development of cognitive processes: memory, thinking, observation, judgements” (Temerivska, 2004, p. 8).

Natural sciences education of future doctors has to be an effective instrument of professional activity, providing appropriateness to the demands to modern specialists, as natural sciences cycle of disciplines not only covers a great part of medical education but also provides students with the knowledge and skills of practical value for their future work, at the same time developing abilities of proper, creative usage of acquired knowledge in future professional activity. Knowledge of natural sciences disciplines is used while diagnosing the patient according to the whole complex of data about him, it provides the right choice of methods of observation, nursing, opens chances for individual approach to every separate case and promotes taking effective decisions in non-standard situations.

Natural sciences education pays special attention to integrated courses, as it is the basis of the scientific picture of the world. Its transition from anthropocentrism to biocentrism is inevitable, and, thus, the change of the educational content is required. The man should be convinced of the unity of everything existing in the Universe, and therefore the idea of general unity and mutual conditionality ought to be the methodological basis of formation of the content of education. The concept of unity, which came from ancient religious and philosophical studies, recognizes as true only the knowledge that reveals the unique essence of “the relation of everything with everything” in everything that exists. This criterion of the truth of knowledge is of great importance at present, when we are building the higher school of future able to train people with scientific and theoretical thinking, with the thinking that is, first of all, integrated. The way from everyday thinking to scientific thinking is multi-level and difficult. Transformation of the “childish” mind unable to understand objective relations of the world into scientific and theoretical thinking of a future doctor is possible only on the grounds of the integrated knowledge system. Not accidentally, attention to natural sciences education is a priority in the course of developing such a system (Styrkina, 2001). Educational programmes of many countries stake right on it.

At the same time, formation of the content of natural sciences training of future doctors requires sticking to a number of requirements, namely: unambiguousness of scientific terms that are used in the process of studying clinical and natural sciences disciplines; relevance of a professionally oriented content of natural sciences disciplines to the field standards of training medical specialists; provision of the motivation to study natural sciences disciplines with the aim of using them in practical professional activities; optimisation of the scope and level of theoretical complexity of natural sciences training for the future doctors to be able to acquire this knowledge; renovation of the teaching content by modern scientific achievements adapted to the level of education and students’ aptitude for assimilation; preservation of the logic of constructing teaching subjects on the basis of fundamental ideas and theories; reliance on natural sciences knowledge and skills in the process of studying clinical disciplines; knowledge natural sciences is the base for studying general medical disciplines; integrated knowledge and skills in medical and natural sciences provide the base for studying special disciplines.

CONCLUSIONS

The integrated approach in the system of medical education can promote more profound understanding of processes that take place in living organisms and the influence of external factors on them. Basic knowledge of natural sciences is the foundation for studying clinical disciplines and an important component of professional training of future doctors. At present natural sciences
training of medical specialists is providing sufficient knowledge, abilities and skills though it has not yet become an effective instrument of professional activity. Natural sciences education of future doctors should become the foundation of their professional activity, ensuring compliance with the requirements to modern specialists, as natural sciences cycle of disciplines not only constitutes the bulk of medical education, but also provides students with the requisite knowledge and its practical application skills, at the same time developing the ability to appropriately and creatively use the acquired knowledge in future professional activity. The challenge of integrating natural sciences component and professional component in training future doctors requires further research.

REFERENCES
ABSTRACT

The article is dedicated to the problem of using an integrative approach to providing consistency of educational methods in the process of training future doctors of philosophy in educational sciences. The aim of the study is to justify the expediency of applying the integrative approach to methods of teaching postgraduate students to ensure these methods consistency during all the stages of studying. The authors have defined the following objectives: to analyze the process of domestic postgraduate education; to identify the problems of educational process organization; to formulate the conceptual principles of integrative approach for providing consistency of educational methods; to show the possibilities of transformation of conventional educational methods and methods of obtaining knowledge into methods of learning. It is substantiated that teaching methods in the system of higher education should be based on the principles ensuring integration of teachers, students, and postgraduates in educational and research activities. We have developed conceptual fundamentals of integrative approach towards providing consistency of educational methods in conditions of continuing education, including PhD studies. We have provided particular examples of using classical classifications and demonstrated ways of their practical implementation in PhD courses.

Keywords: integrative approach, scientific knowledge, learning method, method of obtaining knowledge, consistency of methods, doctor of philosophy, educational sciences.

INTRODUCTION

The issue of essence and organization of the educational process in the context of postgraduate studies has appeared on the current stage as a result of existence of a number of inconsistencies that have accumulated during recent decades, in particular, between: opportunities of educational research process in state institutions of higher education and insufficient level of their implementation in academic activities; significant isolation of educational processes, research activities and training of PhD and doctoral students; the necessity of having permanent educational process for future doctors of philosophy and insufficient development of its organizational methods etc. These inconsistencies show the need for theoretical and practical research on the issue of the educational methods to be used in training postgraduate students as well as these methods’ consistency and integration at all the stages of training: from the first year of study to Master’s and PhD courses.

If we compare the real educational process of postgraduate studies in the 50’s and 60’s of the XXth century and at the beginning of the XXIth century, it will become obvious that this process has been more and more formalized, it has turned into postgraduate students working with their research advisers, the work sometimes being quite fragmentary, and often being limited just to postgraduate students’ reports and to taking PhD examinations. Practical deficiency, with too few exceptions, of the organised educational process in the context of postgraduate studies has caused a
decrease in the quality of research and weakening of scientific and educational opportunities of the future doctors of philosophy.

Renovation of the adequate educational process in the context of postgraduate studies is established in government documents, such as the Law of Ukraine (01.07.XX14, No. 1556–VII) “On Higher Education”, “Procedure of preparation of postgraduate students, obtaining Doctor of Philosophy degree and Doctor of Science degree in higher education institutions”, approved by Cabinet of Ministers of Ukraine (No. 261 of 23.03.2016) and others.

One of the important tasks is to analyze the nature of the methods of obtaining educational knowledge (educational methods), methods of obtaining scientific knowledge and their interaction at various stages of continuous education.

Nowadays, a drastic shift from teaching and education process towards research and education process is taking place in training specialists. Teaching methods in the system of higher education are to be based on the principles of providing unity of training and research activities of teachers, postgraduates and students as the fundamental condition of mastering the scientific method, on the one hand, and the development of teachers’ educational competence, on the other hand.

Postgraduate students’ research work is the continuation of their students’ research work, which “is done by students not only in the process of writing course works or diploma theses but also while participating in the work of students’ scientific societies. Students participate in carrying out research in fundamental and applied sciences, in competitions for the best students’ innovative works, develop innovative multimedia technologies and so on” (Deliya, 2008, p. 33). Thus, scientific research activities of higher education institutions imply collaboration of scientific supervisors and postgraduate students as an important condition of their functioning and development.

The analysis of legislation on scientific activities and scientific policy of the state allows us to say that “integration of science and education was treated, first of all, as an interdisciplinary, i.e. interdepartmental integration, which was aimed at overcoming administrative barriers during organizational and structural separation of science and education. Formal separation of science and education, manifested in their institutional, organizational and management, legislative and financial services, has caused a significant damage to scientific authority of higher school” (Kozlovskiy, 2014, p. 72).

The profile of educational and scientific program of training the Doctor of Philosophy in the field of education in specialization 011 Educational Sciences (specialization: general pedagogy and history of pedagogy) implies profound theoretical and practical training for performing scientific and pedagogic activities as well as scientific consultancy in the field of education, development of scientific research skills for carrying out independent scientific research, professional training and scientific research in the field of education.

THE AIM OF THE STUDY

The aim of the study is to justify the expediency of applying the integrative approach to methods of teaching postgraduate students to ensure these methods consistency during all the stages of studying. The authors have defined the following objectives: to analyze the process of obtaining domestic postgraduate education; to identify the problems of educational process organization for postgraduate students; to define the role of educational methods and methods of obtaining knowledge in the postgraduate education system; to formulate the conceptual principles of integrative approach for providing consistency of educational methods in the context of continuing education; to show the possibilities of transformation of conventional educational methods and methods of obtaining knowledge into methods of learning in the context of postgraduate studies; to analyze particular examples of using conventional classifications and the ways of their practical realization in the context of postgraduate education.

THEORETICAL FRAMEWORK AND RESEARCH METHODS

In the psychological and pedagogical literature the following issues have been investigated: choice and combination of educational methods (S. Honcharenko, A. Aleksyuk, M. Danilov,
I. Lerner, V. Okon, V. Palamarchuk, A. Khutorskyi); integrative approach towards the application of educational methods (I. Kozlovska, L. Lomako, O. Prokaza, O. Syergeyev); unity of education and science (I. Diozhyna, H. Usanov); integrative principles of research activities in the learning process (O. Kubasov, V. Liaudis, V. Proshkin, D. Chernilevskyi and others). Foreign scientists also dealt with the related issues (B. Bhasin, S. Billett, R. Rogers, J. Wallace, L. Shuman, M. Blackett, B. Clark, W. Dennis, E. Garfield, R. Merton, M. Moravcsik, M. Ossovski, W. Shockley, R. Quinn, and others). Though these research works are of unconditional importance, the research into the issue of educational methods integration in the context of their consistency at higher levels of education, in particular, at the level of postgraduate study in professional education is insufficient, though it has significant pedagogical potential.

RESULTS

In 1810 during the creation of the university in Berlin, Wilhelm Von Humboldt introduced a new doctrine by proclaiming the principle of unity of research and learning. He also suggested that the source of higher education institutions development be the development of sciences and research that implies particular relations between a teacher and a student. This innovation, that later was called “a classical university model”, became the main criterion according to which all the further evolution of European and American universities was considered (Ladyzhec, 2004, p. 65). German universities of the XIX\textsuperscript{th} century encouraged the creation of a unique atmosphere of demand for intellect, they used the educational methods that provided students with an opportunity of becoming really educated people by taking part (together with their superiors) in research activities to the extent they were interested in obtaining new knowledge. The idea of education was implemented through real needs, the idea of freedom in learning and research became the source of specialization, “continuous process of demand” for knowledge caused the appearance of an academic research group. American higher education is a vivid example of close correlation between research, teaching, and learning.

According to modern requirements, the approaches to teaching and training of postgraduate students involve: scientific supervision of the postgraduate students’ work, consultancy of academic staff, scientific methodology studies based on different interactive educational courses, problem–oriented style of teaching, such forms of work as lectures, seminars, tutorials, self–study, project work, individual counseling. Teaching methods used include dialogical, heuristic, research and programmable ones.

In a philosophical sense, “a method” means scientific theories tested by practice. While building other theories, any theory of such kind can actually play the function of a method in this particular or even in several knowledge areas. A method is also frequently considered as a complex of techniques of practical or theoretical perception of reality that contribute to solution of a particular problem in the domain of education, some specific complex of intellectual actions, logical procedures, with the help of which the given science wants to find the truth, to verify or disprove it.

“A method of research is a standard model of activities (in pedagogy they are pedagogical activities), directed towards the accomplishment of some scientific task and realized in a complex of techniques and procedures. The richer the range of the methods in this or that science is, the more successful the work of scientists in this field becomes. With the increasing complexity of scientific problems there increases the dependence of the obtained results on the degree of elaboration of research tools” (Honcharenko, 2008, p. 111).

A method is not only a complex of rules, procedures, and approaches but also a system of regulations, principles, requirements that must be focused on the solution of a particular task, achievement of the result in any field of activity. The role of methods in the development of science is tremendous. They distinguish the following methods: observation (direct and indirect, complete and discrete, open and secret, longstanding and retrospective); surveying methods (a conversation – dialogue led in accordance with the developed program, questioning – contact, distance, media with questionnaires of open and mixed types and interview – giving topics for distinguishing points of view and assessment of events); pedagogical experiment as research testing of hypothesis; terminological methods of research (more appropriate for historical research); socio–metric methods; methods of testing.
General methods of scientific research are divided into theoretical, empirical and theoretical–empirical. Sometimes methods of universal and meta–theoretic levels are distinguished.

Educational methods are “a system of techniques and relevant rules of learning developed with consideration of didactic principles and consistencies, the purposeful use of which significantly increases the effectiveness of self–identity in various activities and communication in the process of solving a particular type of learning tasks” (Slastionin, Isayev & Shyianov, 2002, p. 270). It can be assumed that accumulation of the information related to educational methods (there are more than 50), nowadays makes a great scientific fund revealing their diversity.

Taking into consideration the fact that scientists have not decided on the universal understanding of the notion “method”, it is completely natural that there is no universal classification. A variety of approaches towards the classification of educational methods can be explained by the complexity of the object of study and the seriousness of tasks set to modern school by society. The earliest classification is the division of educational methods into the methods related to teacher’s work (narration, explanation, discussion) and the methods of students’ work (exercises, individual work). But even nowadays educational methods are divided into two groups according to the level of managing the educational work: learning activity under teacher’s supervision and students’ independent work.

The issue of educational methods classification in pedagogical literature is controversial in nature. This is indicated by the number of classifications with different approaches made by educators of different years. Since the middle of the XXth century, scientists–educators began to pay more attention to the problem of educational methods classification, considering the level of mastering knowledge and work methods by students.

There are some classifications by one basic feature: if the knowledge source is taken as the classification feature (N. Verzylin), there are distinguished visual, verbal and practical methods; if deductive goals are taken as a basis of classification (M. Danilov), the methods are grouped depending on the nature of educational tasks; if the level of students’ independent activity is a classification feature (I. Lerner), the methods include research, heuristic, problematical, reproductive and informational–receptive methods; if the classification is based on the structure of learning activity (Yu. Babanskyi), they distinguish methods of stimulation and motivation of learning, organization, and realization of learning actions and operations, control and self–control.

Classification by two basic features has been performed by B. Raykov (he used the following features as the basis of classification: pattern of perception (visual, verbal and motor) and direction of the logical process (deductive and research) and E. Brunovt (she grouped the methods according to the kinds of teacher’s and student’s activity and the main direction of the educational activity pattern of the learners). H. Sarantsev used peculiarities of the logical path (inductive and deductive) and the level of educational activity of the learners (reproductive, heuristic and research) as the basis of classification.

V. Palamarchuk has performed her classification by three basic features – information source, logical path, and problematic level. S. Shapovalenko developed the tetrahedral model, which interconnects logical and semantic, source, procedural, operational and management aspects of educational methods. However, the classifications made on more than one basic feature are incorrect. If there are several basic features, the focus should be not on the classification of educational methods, but on the structure, that connects several classifications in the same framework. There are some other classifications of educational methods: by I. Pidlasyi, M. Levina, M. Makhmutova (teaching methods and learning methods), by A. Pinkevych (active and passive methods), K. Sosnytskyi, A. Sokhor (binary forms of logical methods: analytical–synthetic, analytical–inductive, synthetic–deductive) and others.

In our opinion, the notion of “educational method” already contains prerequisites of integration still at the level of definition, because it combines: action of one party: educational work of a teacher (teaching); action of another party: learning–comprehending activity of students (learning); interaction between the parties: the teacher and the student, their common activity: unity
of external and internal aspects in the educational method; unity of objective and subjective aspects of the educational method.

The above mentioned allowed us to formulate a number of conceptual principles on the use of integrative approach to ensure the continuity of educational methods in terms of continuing education, including postgraduate studies:

1) the necessity to ensure organic connection of educational methods with the content of teaching methods and the objectives of study courses of general researcher training (transferable skills), language training courses and postgraduate courses of specialization;
2) combination of internal (structural components within one method) and external (combination of separate methods) integration of educational methods;
3) combination of the methods of teaching (teacher), learning (postgraduate student) and their focus on methods of scientific and educational activities (many educational methods and methods of scientific and educational activities coincide: the method of problem – the problem teaching method; the method of brainstorming and algorithms for solving engineering problems are used both in professional activities and during training etc.);
4) logical continuation of vertical methods integration according to the branches of education: general education school – higher school – postgraduate study;
5) efficiency of postgraduate study highly depends on the organic combination of teaching methods and methods of obtaining knowledge, as well as on the integration of research and learning activities, development and implementation of scientific and research products;
6) consideration of the educational method structure and the use of its components as the elements of integration and development of integration algorithms;
7) the development of the bank of methods to meet the needs of the practice.

Based on these conceptual statements we consider possibilities of transformation of conventional educational methods and methods of obtaining knowledge into educational methods in the context of postgraduate studies. As an example let us consider several particular classifications.

The most widespread classification is the classification of the methods by sources of obtaining knowledge. Verbal methods, where an oral or printed word represents a source of knowledge, include conversations, descriptions, narration, lectures and discussions as well as methods of using the information sources. It is the most accessible group of methods, and teachers very often confine themselves to using just these methods during lectures and seminars. In the context of postgraduate study, narration and description are less relevant but the role of discussions increases drastically. Conventional methods of working with literature sources remain the same as to their form for postgraduate students (taking down notes, picking out some citations, reviewing literature), though the depth of search and thoroughness of analysis increase significantly. Visual methods (the source of knowledge is observation of objects, events etc.) imply the use of laboratory method, different variants, enriched with using technical didactic means etc. At first sight, those methods seem to be secondary in terms of postgraduate studies, but combined with the possibilities of modern information technologies they offer great opportunities in teaching. Practical methods are based on a particular practical activity and are successfully integrated with empiric methods of scientific research.

The classification by the level of involvement into creative activity is more relevant in terms of postgraduate study. Information–receptive method, when the teacher delivers ready information and students perceive and memorize it, is used quite rarely and mostly at the beginning of the learning process. Reproductive method, when students are working in accordance with a particular algorithm, is useful for mastering scientific conceptual apparatus of research, especially experimental. The method of presentation of the problem in training postgraduate students is significantly different from the same method used in secondary or even higher school, where the teacher poses the problem and shows the ways to solve it. Future Doctors of Philosophy themselves must at least identify areas of solution. Heuristic method (the teacher divides the problem into parts and students search for possible solutions) also differs from the conventional one – division of the problem into parts has to be made by the postgraduate student himself, and the teacher only assesses
the result. Eventually, the research method where postgraduate students solve the problems completely independently is the final training method and it transfers the methods of educational knowledge into actual methods of scientific knowledge.

We offer a number of ways for implementing the above theoretical positions into practice: integration of the educational methods within particular classification; integration of methods on the basis of the dominant educational method; integration on the basis of the method’s structure (methods integration by the forms of teaching); development of integrative blocks of educational methods based on the problem teaching methods and so on.

CONCLUSIONS

Solving the problem of the full postgraduate training process is a natural step in the revival of the real academic training and formation of national scientific and educational elite. Methods of teaching in higher education should be based on the principle of unity of teaching and research activities of teachers and students. Conceptual basis for the application of integrative approach to ensure the continuity of educational methods in terms of continuing education, including postgraduate studies is identified as follows: the need to ensure organic connection of the educational methods with the content and purposes of the study courses of general researcher training, language training and postgraduate level specialization; combination of internal and external integration of teaching methods; combination of methods of teaching, learning and their orientation towards methods of scientific and educational activities; logical continuation of the vertical integration of methods according to the branches of education: general education school – higher school – postgraduate studies; effectiveness of postgraduate studies depends largely on the organic combination of educational methods and methods of obtaining knowledge, on the integration of research and educational activities etc. These principles serve to transform the conventional teaching methods and methods of obtaining knowledge into the educational methods to be used in postgraduate courses.

Vertical integration of educational methods presented in this article implies the continuation of the research toward the development of teaching content specialization that can be archived and constantly upgraded.

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POST–SECONDARY AND HIGHER EDUCATION
OF INDIGENOUS PEOPLES IN CANADA:
HISTORICAL, SOCIAL, ECONOMIC, CULTURAL, FAMILY–RELATED, AND
INDIVIDUAL BARRIERS

ABSTRACT
The article deals with the issues of post–secondary and higher education of indigenous peoples in Canada. The main objectives are defined as the theoretical analysis of scientific and pedagogical literature highlighting different aspects of the problem under research and identifies of the barriers to obtaining post–secondary and higher education by indigenous peoples. The post–secondary and higher education have been studied by foreign and Ukrainian scientists (T. Andryushchenko, O. Barabash, N. Bidyuk, B. Burtch, M. Busko, J. Friesen, V. Friesen, S. Honcharenko, V. Kirkness, D. Klyne, O. Kotsyukova, T. Kuchai, L. Lukyanova, H. McCue, M. Mendelson, N. Nychkalo, O. Ogiyenko, J. Peters, R. Price, L. Pukhovska, J. Silver, F. Simard, S. Sysoyeva, J. White, I. Zyazyun). The legislative and normative framework of post–secondary and higher education of indigenous peoples in Canada is considered; the statistical data which characterise the indigenous peoples’ participation in post–secondary and higher education programs are presented; the existing barriers to getting post–secondary and higher education by indigenous peoples are analysed and identified as historical, social, economic, cultural, family–related and individual ones. The research methodology comprises theoretical (logical, induction and deduction, comparison, structural and functional, systematic, analysis and synthesis), and applied (discussion, questioning and interviewing) methods. The research results are presented.
Keywords: Canada, higher education, post–secondary education, indigenous peoples, historical, social, economic, cultural, family–related and individual barriers.

INTRODUCTION

In the document “Learn Canada 2020” adopted by the Canadian Council of Ministers of Education the post–secondary education is defined as an integral part of lifelong learning (Mukan, Barabash & Busko, 2016). The governments of provinces and territories direct their efforts towards raising the quality of post–secondary education and increasing its accessibility with the aim to enhance the number of students involved into professional educational programs. Post–secondary education contributes not only to the increase of wages of particular individuals but also to the improvement of the overall welfare of the country. It is also a factor that affects the decrease in crime rate, an increase in GDP and reduction in social payments. “Education policy goals articulated by Canada and other organizations have been to encourage youth to attend university and higher education programs in greater numbers than in the past in order to engage and reap benefits in an increasingly competitive and global knowledge–based economy” (Clement, 2009, p. 70). Post–secondary education of indigenous peoples in Canada is one of the key aspects of post–secondary education development at the beginning of the new century, together with the increase in available places, unification of quality standards of post–secondary education at the government level, accessibility and credits transfers while moving from one higher education establishment to another (Learn Canada 2020, 2009).

THE AIM OF THE STUDY

The aim of the article is to explore the problem of post–secondary education of indigenous peoples in Canada. The authors have defined the following objectives: to analyse the scientific and pedagogical literature, which highlights different aspects of the problem under research, to study the obstacles for higher and post–secondary education of indigenous peoples.

THEORETICAL FRAMEWORK AND RESEARCH METHODS

The theoretical and methodological framework of our research is as following: philosophical theses of phenomena interconnection and interdependence, the principles of unity of theory and practice of post–secondary and higher education; conceptual theses of comparative education (M. Leshchenko, O. Lokshyna, N. Mukan, L. Pukhovska, A. Sbruyeva); fundamentals of lifelong education (O. Barabash, M. Busko, I. Leshchenko), theory and practice of adult education (M. Knowles, L. Lukyanova); structural and functional, systemic approaches (N. Alboim, A. Verbytskyi); multicultural approach (O. Ivashko, M. Lee); psychological, pedagogical, sociological research of post–secondary and higher education of indigenous peoples (F. Abele, S. Childs, J. Clement, C. Dittubrner, R. Finnie, K. Graham, M. Kramer).

Post–secondary and higher education is the subject of scientific interest of such Ukrainian researchers as Т. Andryushchenko, N. Bidyuk, S. Honcharenko, T. Desyatov, I. Zyazyun, L. Lukyanova, N. Nychkalo, L. Pukhovska, S. Sysoyeva. Post–secondary and higher education in Canada have been studied by O. Barabash, M. Busko, M. Borysova, O. Kotlyakova, T. Kuchai, O. Ogienko. Among foreign scientists, we would like to emphasize the works of B. Burtch, J. Friesen, V. Friesen, H. McCue, V. Kirkness, D. Klyne, M. Mendelson, J. Peters, R. Price, J. Silver, F. Simard, J. White.

The methodology of our research comprises different theoretical and applied methods. We have used the comparative–historical method that allowed studying the scientific and pedagogical literature on the issues under discussion; logical and comparative methods that have been used to study educational documents, post–secondary and higher education establishments’ academic programmes for indigenous peoples in different provinces and territories of Canada. In our research the logical method has been used to define the obstacles to higher education of indigenous peoples; methods of induction and deduction have been used for gathering theoretical and factual material, synthesizing and analysing information from available resources. We have used content analysis to study statistical data about indigenous peoples’ participation in educational programs. The discussion with the staff of the University of Saskatchewan in Canada was held during the research.
RESULTS

The results of the research into post–secondary education of indigenous peoples in Canada done by the scientists of Queen’s University in 2010 show that about 30% of indigenous peoples finish only the first or the second year of post–secondary education while this percentage among non–indigenous people is much lower – only 13%; indigenous peoples have much less savings for education in comparison with non–indigenous people (33% and 42%, respectively); indigenous peoples receive more financing for post–secondary educational programs (government grants and scholarships) than residents of non–indigenous origin (Finnie, Childs & Kramer, 2010).

In their research, the Canadian scientists repeatedly pay attention to the lower percentage of people who completed post–secondary education among indigenous peoples in comparison with non–indigenous peoples. The same tendency is also characteristic for the beginning of the XXI century. For instance, in 2005 in the province of British Columbia only 4 of 10 indigenous people completed post–secondary education. The critical situation is predominantly observed in higher education. In particular, the scientists of British Columbia inform about the increase in the number of indigenous students during 2001–2006 from 6% to 8%, however, these indicators are much lower than the representativeness indexes of non–indigenous peoples in higher education (23%) (Silver, Klyne & Simard, 2003). This tendency is characteristic to all provinces of Canada.

For many years post–secondary education has been used as a means of differentiation of indigenous peoples from non–Aboriginal representatives in the Canadian society. As a result of adopting amendments to The Indian Act in 1876, Indian people who completed a college or university lost Status of Indian and were considered to be full members of Canadian society as they were believed to have become fully “civilized”. Due to historical factors, higher and post–secondary education was considered by indigenous peoples as a way of losing their individual identity and therefore it was not popular with them (Opening the door: reducing barriers to post–secondary education in Canada, 2011). The researchers of historical and pedagogical problems note that in 1968 only 168 students of Indian origin studied in colleges and universities of Canada (information about Métis and Inuits is not available) (Opening the door: reducing barriers to post–secondary education in Canada, 2011).

Unlike Canada, quite a few universities in the USA were opened specifically for providing higher education to indigenous peoples, among them being Harvard, Yale, and Dartmouth universities. In 1970 only the University of Montana (Missoula, the USA) trained more than 300 representatives of Indian origin (Opening the door: reducing barriers to post–secondary education in Canada, 2011).

In Canada, during XIX–XX centuries in post–secondary and higher education establishments, there were opened only several separate departments dealing with investigations into ethnic, anthropological, linguistic, historical, and archaeological characteristics of indigenous peoples. By the late 1960, the country had developed neither the policy and strategy of the indigenous peoples’ education nor any programs to support and finance their post–secondary education. Only from the mid–1970’s the Canadian government started to introduce first financial support programs for Indians who had the status of indigenous people (Opening the door: reducing barriers to post–secondary education in Canada, 2011).

The low rates of academic achievements still in public schools are, first of all, among the social factors that prevent students of indigenous origin from getting the post–secondary education. Many students of indigenous origin either don’t finish school or receive incomplete secondary education, thus failing to continue getting an education in higher education establishments. According to the results of 2006 census, 40% of indigenous students aged 20 to 24 years didn’t complete secondary education (Price & Burtch, 2010) and therefore didn’t receive the required number of credits for admission to college or university. Moreover, many students of indigenous origin who finish school and receive complete secondary education, often have low success rates making it difficult for them to be admitted to institutions of the post–secondary education system. Besides, those applicants who are enrolled often do not have enough skills for
successful learning, causing their expulsion after the first or second year (Best practices in increasing aboriginal postsecondary enrolment rates, 2002).

The Centres for Adult Education function in different provinces and territories of Canada with the aim to enhance academic achievements of Canadians. They help adults to improve their reading and math skills, to study the subjects required for obtaining Secondary School Certificate, to prepare for entering college or university etc. Indigenous peoples, any other residents of the country or immigrants with permanent residence in Canada can get the services of the Centres free of charge (Silver, Klyne & Simard, 2003).

The high level of unemployment among indigenous peoples is a not less important social factor that contributes to the low numbers of indigenous people getting the post–secondary education. In many communities, the rate of unemployment amounts to 50%, and sometimes even to 75%. As under such conditions, temporary seasonal work and social benefits are the major sources of income, most families can’t afford to pay for their children’s education and have to search for additional financial support. There are many Canadian government support programs for Status Indians, whereas Métis and Non–status Indians do not have an opportunity to receive such support. Besides, most often students have to leave homes for cities or university campuses, but there are not enough funds allocated by the government to fully cover the cost of tuition, textbooks, accommodation, and catering (Aboriginal peoples and post–secondary education, 2004; Best practices in increasing aboriginal postsecondary enrolment rates, 2002).

According to M. Frenette, one more reason is a lack of jobs in the labour market for indigenous people with professional qualifications, in particular, in the remote northern districts of the country and in reservations. In the course of the research, it has also been discovered that representatives of indigenous origin normally choose professional educational programs in the sphere of the humanities and social sciences, while non–indigenous people often choose physical and mathematical disciplines as well as computer sciences. This tendency is particularly typical of aboriginal males. As it is known, in the present labour market of Canada the professions of humanitarian and social spheres are less popular and the specialists in these fields receive much lower salaries than those working in the field of physics and mathematics as well as computer industry. Consequently, the choice of professional programs significantly influences the level of income and unemployment among people of indigenous origin (Frenette, 2014).

At present many universities of Canada offer support programs and preferential terms for indigenous people that choose medical, engineering and legal specialties. The University of Saskatchewan was the first university to realise the lack of qualified lawyers among the indigenous peoples of the country. In 1973 it introduced support programs for indigenous peoples who intended to enter its College of Law (Best practices in increasing aboriginal postsecondary enrolment rates, 2002).

On the way to obtaining a post–secondary education by the indigenous peoples, there are also obstacles relating to cultural diversity between indigenous and non–indigenous peoples of Canada. The system of post–secondary and higher education of Canada, learning structure, academic process, programs and assessment systems in educational establishments are built on values and knowledge system of European society, which greatly differs from indigenous peoples’ educational traditions. Very little attention is paid to cognitive peculiarities of remembering and handling information, and education styles of indigenous peoples that differ from the non–indigenous representatives of Canadian society. Among the teaching staff, one can meet representatives of different nations and nationalities, but there are only a few indigenous representatives who could understand students and encourage them to learn by their own example (Best practices in increasing aboriginal postsecondary enrolment rates, 2002).

The presence of people of indigenous origin in the composition of the faculty or support staff of higher or professional education institutions will help ensure the implementation of effective strategies for attracting and retaining students of indigenous origin (Aboriginal peoples and post–secondary education, 2004).
Family–related factors that prevent from getting higher and post–secondary education refer to intensive responsibility for the family members, traditionally close relationships with family and indigenous community as well as early marriages, compared to the Canadian non–indigenous population. This raises a series of other questions related to creating Centres for childcare affiliated to universities or colleges, allocation of additional funds to finance childcare at home, mobility, family expenses etc.

On the other hand, family factors, which prevent gaining a post–secondary education, can be attributed to the fact that most of the parents have no post–secondary education, and therefore do not always encourage their children to continue their education at universities and colleges. Numerous studies of Canadian scientists show that the higher the education level of parents, the greater the likelihood that their children will study in higher education establishments (Opening the door: reducing barriers to post–secondary education in Canada, 2011).

Individual obstacles on the way to getting higher and post–secondary education relate to the lack of personal motivation. A low social status and unemployment often cause depression, apathy, substance abuse, physical domestic violence, and health problems. In the communities of indigenous peoples, there is not enough support from families or government institutions / organizations that would help them to overcome all these problems. The students who leave hometowns, reservations and move to study at universities suffer from depression, stress, and discrimination; this generally affects their studies and often causes expulsion from higher education establishments (Best practices in increasing aboriginal postsecondary enrolment rates, 2002).

Nowadays Canadian government promotes the development of post–secondary education of indigenous peoples through special funding programs. Among them, there is Post–Secondary Student Support Program, which provides financial support for the representatives of Status Indians and Innuits that study in institutions of higher or post–secondary education. The program covers the costs of students’ training, lodging, relocation expenses, books and more. The program does not fund the education of Métis and Non–status Indians, the exception being Nunavut and Yukon provinces. In the Northwest Territories the government finances higher and post–secondary education of all indigenous peoples, and in the territory of Yukon the government offers a flexible system of subsidies, only partially covering the costs of training Métis and Non–status Indians.

University and College Entrance Preparation Program is one more example of providing financial support. It covers training costs to meet the necessary academic entrance requirements. All other representatives of indigenous peoples can use students’ loans and grants programs that are offered by the territorial and provincial governments to all students regardless of their origin.

CONCLUSIONS

The results of the analysis of pedagogical literature and statistical data prove that there are barriers of historical, social, economic, cultural, family–related and individual character to getting post–secondary education by indigenous peoples.

But it is important to emphasize the positive experience of Canada in providing support for indigenous peoples in overcoming these barriers. Institutions of higher and post–secondary education throughout Canada offer to indigenous peoples various educational programs and opportunities of acquiring different specialities, though they differ by the level of involvement of these peoples into educational process and provision of the basic principles of successful learning to the representatives of the indigenous population.

Most educational institutions offer academic and psychological support to students of indigenous origin, however, representation of indigenous people among the teaching staff or management bodies of schools is limited.

Studying the Canadian experience of attracting teaching staff of indigenous origin to work in the education system of the country presents the prospect of further research.

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**ABSTRACT**

The article deals with the benefits and challenges of the double diploma programs within the national higher education system. The main objectives are defined as the theoretical analysis of scientific and pedagogical literature highlighting different aspects of the problem under research, and study of the double diploma programs implementation in European higher schools and Ukrainian universities. It highlights the historical background of the appearance of the double diploma programs in Europe and in Ukraine, the regulatory framework of this process, benefits and challenges of their realisation within the national system of higher education. The conclusions drawn show that these programs are the basis for accomplishing the major tasks defined in the Bologna Declaration and promote students’ mobility, increase the number of students in the European higher education space, and improve the quality of professional training.
Keywords: double diploma, student mobility, ERASMUS, ECTS, the Bologna process, higher education, foreign partner university, the European higher education space, exchange program.

INTRODUCTION
In terms of world globalisation, the rapid expansion of information space and the urgent need to develop innovative technologies in the modern world, the issues of preparation of highly qualified specialists gain a particular relevance.

Modernisation and improvement of the quality of education and science, on which the economic and political stability of the country and its position in the world depend, are one of the major priorities of the development of modern society.

Improving the competitiveness of domestic institutions of higher education in the market of educational services and enhancing the quality of their positioning in the system of a single world educational space are possible through the implementation of the so-called double diploma programs. It should be noted that two graduate diplomas give the future specialist opportunity to carry out his professional activities in almost every European country, presenting the diploma that has more value in this or that country.

Creating double diploma programs in Ukrainian universities, thanks to the support of the European education community, is becoming more and more relevant. Joint programs are found in a variety of subject fields, but most often they are used in economics, engineering and business education, law and management.

THE AIM OF THE STUDY
The aim of the study is to follow the path of creating double diploma programs and their implementation in Western Europe and Ukraine, as well as to highlight benefits and challenges of their realisation within the national system of higher education.

The objectives of the research are to consider the historical background of occurrence of the double diploma programs within Western Europe; to examine the regulatory framework of the double diploma programs implementation by European countries; to analyse the implementation of the double diploma programs within the national system of higher education; to highlight the advantages, difficulties and possible solutions to the emerging problems in order to improve the conditions of implementation of double diploma programs in Ukraine.

THEORETICAL FRAMEWORK AND RESEARCH METHODS
The development of joint programs is one of the priorities of international cooperation between partner universities around the world. International experts in higher education believe that no other form of interaction between institutions of higher education brings such significant results in the development of cooperation with foreign partners as a joint program.

Theoretically, this process could contribute to the equalisation of the value of diplomas of each of these countries, this being the main idea of the so-called “Bologna process”. But despite numerous advantages of the double diploma programs the universities of Ukraine have to solve a number of urgent problems associated with them. These problems are dealt with in this research.

Research into the issues of the national higher education becoming part of the European educational space and the solution of the problems introduced by Sorbonne and Bologna declarations are done by many Ukrainian researchers, among them I. Babyñ , Ya. Bolyubash, V. Hrubinko, A. Zakhorodnii, M. Zhurovskyi, M. Karpenko, V. Kremen, K. Levkivskyi, M. Stepko, T. Finikov, V. Shynkaruk and others. The meaning and methods of realising academic mobility within the European higher educational space are also investigated in detail. The research works of V. Astakho, O. Bolotska, S. Verbytska, N. Gulyaeva, L. Hurch, I. Zavgorodnii, V. Kapustnik, O. Kyslova, I. Lapshin, V. Lisovyì, A. Mokii, L. Sokuryanska, M. Stepanova, H. Shchokin etc. have made a great contribution into studying these issues. National and foreign experience of creating an effective system of academic mobility as an important educational factor of European integration of Ukraine is considered in the works of these scholars.

RESULTS
A double diploma as a phenomenon is rather new in the history of foreign and national higher education. The urgent need to develop such programs appeared with the beginning of the social and economic integration processes in Europe in the 80–s of the twentieth century, and it became particularly pressing with the emergence of the European higher education space (Grycyuk, & Lyakisheva, 2014).

It should be noted that the desire to get the adequate professional education outside their own countries was inherent even for the students of the first European universities. These traditions were kept for a long time, having acquired a mass character during the globalisation of higher education. According to the UNESCO Institute of Statistics Survey, there is a considerable growth in the overall number of international students: while estimated at a total of 2.1 million in 2002, their number reportedly increased to 3.4 million by 2009 and is currently estimated at around 4 million, thereby representing 7% of the global migrant population aged 15–29 (ICEF Monitor. (2015).

Global integration processes of higher education were supported by various international documents concerning notification (confirmation, acknowledgement) and equivalence (comparability) of national documents on education. Preparation and signing of these documents began in Europe in the 50–s of XX century with actualisation of the need for the social and economic association of leading European countries. It was then that the following three regional conventions were adopted: “European Convention on the Equivalence of Diplomas leading to Admission to Universities” (December 11, 1953), “European Convention on the Equivalence of Periods of University Study” (December 15, 1958), and “European Convention on the Academic Recognition of University Qualifications” (December 14, 1959).

Academic recognition of an educational document received in one of the foreign educational institutions actually meant that the European countries developing contractual acts recognised common principles, such as: the same standards of admission of persons who have completed secondary education, to universities and higher education institutions at the university level; recognition of study courses, covered by the citizens of one country by universities (higher schools) of other countries; recognition of university diplomas.

The purposeful activities of UNESCO played an important role in dealing with the issues of international cooperation in higher education. Since the mid–70–s six regional conventions have been elaborated under the authority of UNESCO. Among them, there was “Convention on the Recognition of Studies, Diplomas and Degrees concerning Higher Education in the States belonging to the Europe Region” signed in Paris on December 21, 1979. In 1982, the Convention was signed and ratified by Ukraine (Shchekin, 1995). These and other international instruments have expanded the possibilities for young people to get the higher education abroad on the basis of the national documents of already existing and recognized education. This certainly reduced the terms of studying abroad.

The further the political and socio-economic integration processes developed in Europe, the more obvious became the need for decision-making on coordination of the higher education systems development, adaptation of training levels, harmonization of the content of learning in related professional fields, intensification of student mobility, assurance of the education quality enhancing the competitiveness of graduates in the labour market. These ideas were reflected in Sorbonne and Bologna’s declarations signed by European countries (Grycyuk, & Lyakisheva, 2014).

Not only existing international documents on cooperation in the field of higher education but also the achievements of famous academic mobility programs ERASMUS, ERASMUS MUNDUS and TEMPUS were taken as the basis for meeting the challenges of promoting student mobility. We should remember that in 2014 the academic mobility programs ERASMUS, ERASMUS MUNDUS and TEMPUS were absorbed by most ambitious contemporary academic exchange program ERASMUS + funded by the European Union. Many of the projects implemented since 1987 as a part of those programs were directed to providing students with grants for individual mobility. They had the opportunity to study a semester or an academic year abroad. The ERASMUS MUNDUS
program (ERASMUS + since 2014) is very popular in European countries. During the last twenty years, more than two million students have used their grants and recently the number increased to over 3 million (Erasmus Programme).

Ukraine also took an active part in the ERASMUS MUNDUS projects. Thus, during the competition for participation in 2013–2014 academic year, 87 Ukrainian students won the right to take training within the ERASMUS MUNDUS program. In general, during the years 2004–2013, 329 Ukrainian students received grants to study in Master and Doctor Degree programs of Erasmus Mundus (From Erasmus Mundus ... to Erasmus+ (Eastern Partnership Countries Facts and Figures).

Organization of such academic exchange programs necessitated searching for mechanisms of the optimal use of students’ time and transferring credits in the academic subjects which they studied at a foreign university to the general list of the subjects. Therefore, the ECTS credit system was created and tested. It provided the possibility of credit transfers and accumulation of students’ academic achievements. The ECTS system turned out to be so successful that by the unanimous decision of the ministers who signed the Declaration it was put on the basis of implementing the ideas of the Bologna process. It was emphasised in “Action Plan for mobility”, specially approved by the heads of European states on December 14, 2000, in Nice. Currently, conventional approaches to determine the academic year in 60 credits simplifies the calculation of student’s training effort required for graduation in any country that is part of the European educational space (Franciya u yevropeyskomu prostori vyshchoyi osvity, 2005). Thus, the conditions necessary to gain credits in any foreign higher educational institution have been created. Further development of educational integration, launched by the Bologna process, has led to the opportunity for the student to invest the same credits as conventional educational currency into his academic achievements at different educational institutions. So, the idea of integrated master degree courses appeared and began to be implemented.

For example, in the framework of the ERASMUS MUNDUS program (it included the cooperation of European universities with educational institutions of the third countries) the following has been done:

1. Creation of a consortium of higher education institutions from at least three different countries that conduct professional training and implementation of these educational objectives.
2. Development of common criteria for admission of students to higher schools that are members of the consortium (European, as well as third countries) that trust each other and believe in transparency of the students’ enrolment procedure.
3. Elaboration of common methods of assessing students’ knowledge and full mutual recognition of the students’ performance outcomes (the results of examinations, credits, tests etc.). Thus, for example, examinations passed in one of the universities from the consortium are automatically fully recognised by other educational institutions of the consortium.
4. The introduction of the common (integrated) training program that is recognised by all universities belonging to the consortium. Each higher education institution, a member of the consortium, while implementing a joint program recognises all educational periods along with appropriate forms of control. In addition, each of these educational institutions should have official confirmation of the legitimacy of integrated programs in accordance with the legal requirements of their own country.
5. Common criteria for determining tuition fees. Differentiation of payment quota is allowed only for two groups of people: European students and students from the third countries.
6. Compulsory period of students’ mobility: the student’s individual plan should include the program of study in at least two higher schools that are part of the consortium. Taking a certain training course, students should know the sequence of its periods in different host universities; mobility options are permitted that guarantee getting recognised joint, double or multiple diplomas after successful graduation.
7. The possibility of getting a certain number of ECTS credits in every higher educational institution that is a part of the consortium, depending on the developed individual plan.
8. Mandatory contact with at least two European languages.
9. Adherence to high standards of training students and teachers from the third countries by consortium (Grycyuk, & Lyakisheva, 2014).

The minimum requirement for graduation in the integrated educational program is to obtain a double diploma. The official award of a dual or even multiple diploma means that the student receives two or more national diplomas awarded to him by two or more educational institutions-members of the consortium. The joint diploma is awarded by the decision of at least two educational institutions that implement an integrated training program. These diplomas are recognised in the countries where the educational institutions that awarded these degrees are located (Podwójny dyplom. Charakterystyka wspólnych studiów).

Along with the scheme of studying in integrated education programs within the consortium, which is enough complex to be implemented, cooperation in this sphere between individual higher schools has become popular. Contractual relations concerning students exchange programs practised between higher schools of different countries since 80–s of the twentieth century, with the Bologna process launching, has been deepened to the possibility of transferring credits obtained by a student and awarding him with the document certifying parallel education abroad.

Ukraine also actively joined that process. First of all, well-known national universities, building on existing contacts with foreign universities, after Ukraine signed the Bologna Declaration in 2005 and committed to perform the outlined tasks, started signing bilateral agreements on promoting academic mobility. Ways of implementing double degree programs through consortia and bilateral agreements having been worked out in the West, they started being extrapolated to other eastern countries including Ukraine.

Ukraine’s geopolitical location and well–known tradition of higher education, especially in technical and natural sciences have drawn attention and interest to our country.

In the last decade, most national higher educational institutions recognised the particular importance of double degree programs in facilitating entering the European educational space and started the active search for foreign higher schools– partners. Most of them were higher educational institutions of Great Britain, Germany, Italy, Spain, France, the Netherlands, Slovakia, Czech Republic, Poland and other countries (Grycyuk, & Lyakisheva, 2014).

Thus, having analysed the international relations of higher educational institutions of Vinnysia region, we can affirm that all state higher schools offer their students double diploma programs, that are based mainly on bilateral agreements between the national and foreign educational establishments. In most cases, they are higher schools from Poland and Slovakia. For example, Vinnysia Institute of Trade and Economics of Kyiv National University of Trade and Economics works actively in this direction with Pan-European University (Bratislava, Slovak Republic) and University College of Tourism and Ecology (Sucha Beskidzka, Poland); Vinnysia National Technical University cooperates with Lublin University of Technology (Poland) and Kielce University of Technology (Poland).

Foreign universities offer a variety of options for double diploma programs (see Table 1)

<table>
<thead>
<tr>
<th>Basic Program Parameters</th>
<th>Proposed options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Higher Education Degrees</strong></td>
<td><strong>Bachelor</strong></td>
</tr>
<tr>
<td><strong>Forms of education</strong></td>
<td>Full–time, part–time, distance, combining different forms</td>
</tr>
<tr>
<td><strong>Duration of education</strong></td>
<td>One – two years</td>
</tr>
<tr>
<td><strong>Academic mobility scheme</strong></td>
<td>– 2 (3) years of full-time professional studies at a national higher school +2 (1) years at a foreign partner higher school; – 3 years of full-time professional studies at a national higher school +1 year at a foreign partner higher school;</td>
</tr>
</tbody>
</table>

Table 1
| foreign partner higher school + 0.5 years of distance learning. | professional studies at a national higher school + 2 years of part-time professional studies at a foreign partner higher school (combined with distance learning). |

**Learning Content**  
The curricula of students’ training are consistent and identical, and credits in similar disciplines are transferable.

**Final examination**  
1. Examinations in national and partner higher schools.
2. The graduation qualifying works are fulfilled and defended:
   - at national and partner higher schools (in the native language and the language of the country of study);
   - at national higher schools (in the native language);
   - at partner higher school (in the language of the country of study), to be transferred at the national higher school.

Implementing educational double diploma programs, Ukrainian universities are aimed at the following: to improve the quality of education through the use of advanced experience of foreign partner universities, thereby increasing the competitiveness of the Ukrainian universities in the world educational space; to increase the investment attractiveness of universities through improving their graduates’ competitiveness and quality of professional knowledge; to improve their academic staff professional development; to attract additional sources of financing for universities’ activities; to promote the development and strengthening of university international relations and international academic mobility.

Double diploma training programs have many advantages for Ukrainian students. In particular, they include:

1. Significantly saving the time necessary for obtaining specialist education. The student can get simultaneously two diplomas: from national and foreign institutions of higher education.
2. **Being** financially advantageous for students: they do not pay tuition fees for all the academic years, as it happens in case of independent entry to a foreign university.
3. Getting experience of staying in a fundamentally different educational system, getting practice-oriented, competence training by using modern technical equipment in classrooms, laboratories, research centres etc.
4. Getting the high-quality professional education and internationally recognised diploma, enabling employment abroad without the necessity to confirm it.
5. Attending lectures by leading professors in Europe, participating in joint research and educational programs.
6. Obtaining additional knowledge in related fields of science, professional directions, and qualifications.
7. Gaining experience in offices, establishments, institutions, offices, enterprises of European countries during practical training.
8. Improving knowledge of foreign languages.
9. Getting acquainted with culture and traditions, peculiarities of doing business in one of the EU countries.
10. Feeling psychologically secure due to studying in academic groups together with fellow students, tutoring, mentoring etc. (Grycyuk, & Lyakisheva, 2014).

However, creating joint programs between universities of Ukraine and Europe is accompanied with many problems resulting from incomparability of requirements of various European educational institutions. The most vivid are the problems concerning differences in the structure of curricula, tuition funding, quality assurance and control, poor foreign language competencies of both teachers and students, synchronisation of students’ mobility in universities of different countries.
Training in two universities simultaneously requires the actual and formal compatibility of curricula and syllabi, which is not always the case. Theoretically, part of the training program could be completed in any of the partner universities chosen by the student. However, the full course of a student’s training in two universities-partners should correspond to the full course in any of these universities. Thus, the simplest solution to this problem would be the adoption of completely identical curricula. The natural way to do this is to compare all the programs, analyse their advantages and disadvantages, and to develop the new program comprising all the advantages and excluding the disadvantages. Unfortunately, the main obstacles to this is the industry standards, approved at the ministerial level, including lists of compulsory courses, standards for study hours and their distribution by semesters, the number of study hours for lectures, laboratory work, practical classes and self-study. However, we can implement changes in the structure of optional courses towards their compliance with the mandatory disciplines at the universities with which the double diplomas programs are going to be implemented.

Therefore, a simpler way is to cooperate with one particular university or, at least, with the universities in one country.

Having analysed the situation with implementation of double diploma program in Vinnytsia Institute of Trade and Economics of Kyiv National University of Trade and Economics and Vinnytsia National Technical University and considering the number of students involved in this process we can affirm that only 5 and 20 students, respectively, appeared to be interested in the proposed exchange program. The financial component of double diploma programs turned out to be crucial in deciding whether to participate in the program or not. Moreover, some students said that because of the ever-increasing fees for double diplomas programs it was difficult to find the money for them.

The high cost of these programs relates primarily to the fact that investments in creating partnerships for such academic exchanges are great. The preparatory stage involves, first of all, the costs associated with a large number of necessary business travels, organisation of negotiations, overcoming the language barrier. Great investments are needed to create the necessary infrastructure for implementing a joint project. To partly solve this problem is possible by increasing the number of partnerships and sources of funding at both European and national levels (grants and funds), by involving business to financing such programs, channelling financial support to the “organized mobility” programs, delegating the rights of financial management to the supervisors of joint programs for developing effective cooperation.

The issue of providing and controlling the quality of training is primarily connected with the structure of curricula and course programs, qualifications of teaching staff and their motivation for professional development, improvement of teaching methods and enhancement of the evaluation objectivity, feedback between the participants of the educational process, active participation of the university in national and international programs of training professionals with higher education.

World practice shows that the lack of foreign language skills of students and teaching staff involved in this process hinders the implementation of double diploma programs. Therefore, universities have to organise learning courses of foreign languages, because usually, the level of foreign language competencies by Ukrainian partners is insufficient for professional communication. The problem of language learning may be partly solved through involving students and teaching staff to international programs of internship and practical training, their participation in volunteer programs etc.

A significant difference of educational systems in approaches to quality standards, the role of teachers, the correlation of classroom workload of students and their self-study, and assessment of learning outcomes should also be taken into account. The existing differences are based primarily on the fact that Ukrainian system of higher education is built on the model 4 + 1 or 4+ 1.5. That is why three-year undergraduate programs that are common in Europe are not recognised in Ukraine. It makes practically impossible to recognise a graduate diploma awarded by European university in Ukraine and makes it harder to get the education at the Master level. Besides, the fact that the secondary education in European countries requires 12–13 years, while in Ukraine only 11 years
isn’t also taken into account. Contrary to Ukrainian students who are overloaded with classes, student – teacher relations in European universities have more democratic character. There arises a problem of understanding at a professional level. Therefore, to solve the issue of synchronising the movement of students within the universities of different countries, first of all, a general view of the educational process should be changed at the communication and organisational levels. It is necessary to upgrade curricula and programs, provide modern material and technical equipment of laboratories, develop distance form of education, and promote teaching in several foreign languages (Vitenko, 2014).

The students are motivated to participate in double diploma programs, first of all, by the search for new knowledge, experience and the opportunity to learn a new culture. In their responses, most of them place priority on the possibility of getting diploma from a prestigious Western university simultaneously with receiving higher education at home, the possibility of getting practical training in foreign companies during or after studying at university, gaining experience of living in another country and learning another culture. In addition, students point out the fact that in the future they will be able to link their career plans with the work in a foreign company. This requires not just professional competencies, but also the ability to find the common language with others, to communicate effectively and find appropriate arguments, to work in teams, to know professional terminology in foreign languages. An equally important factor is the belief that the graduates will find guaranteed employment at the end of the program. Students say that such training process makes their attitude to work different and teaches them to be independent.

It is important that in many cases the experience of getting training in a European higher school makes students rethink the very idea of learning. Students say they are fundamentally changing because training requires hard work in libraries. Even those who were not very diligent students in Ukraine had to study hard in a foreign higher school. The students derive pleasure from studying and understand how to plan their future career. Besides, students become more competent in a foreign language, their self-esteem rises, they come to understand and respect other points of view, get new friends and contacts.

CONCLUSIONS

The study of the experience of developing and implementing double diploma programs in Europe shows that these programs form the basis for accomplishing the major tasks defined in the Bologna Declaration and promote the mobility of students, increase the number of students in the European higher education space, improve the quality of professional training.

The analysis of models of double diploma training proves their sufficient capacity and effectiveness. This direction of reforming higher education is developing intensively in Europe. It needs to be improved in the system of Ukrainian higher education as well. Nowadays, most Ukrainian universities recognise the importance of implementing “double diploma” programs to meet the challenges of entering the European educational space and to raise the quality of professional education. The higher educational institutions that are involved in the “double diploma” programs are considered to be the leading in innovation and have high status.

It should be noted that foreign partners, as well as national universities that are interested in expanding ties, are studying deeply and objectively the barriers to the mobility of students and are actively seeking the ways of their levelling and overcoming.

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FORMATION OF READINESS OF FUTURE MARINE ENGINEERS FOR INTERCULTURAL COMMUNICATION USING GAME SIMULATION TECHNOLOGY

ABSTRACT

The article is dedicated to the problem of formation of future marine engineers’ readiness for intercultural communication. The purpose of the article is defined as analysis of the formation of readiness of the future marine engineers for intercultural communication by means of game simulation technology. The authors analyze the of scientific and pedagogical literature highlighting different aspects of the problem under research, define the main terms and notions, and focus on pedagogical technologies, contributing to the formation of future marine engineers’ readiness for intercultural communication. The issue of readiness for intercultural communication of the future marine engineers is dealt with in the works of such researchers as F. Batsevych, H. Devyatova, V. Yeromina, A. Kozak, O. Krychkiwska, N. Paperna, A. Sadokhin, M. Safina, A. Solodka, M. Sokolova, L. Yusupova. The simulation game technologies have been presented as the mean of developing students’ instrumental motivation to learn a foreign language in general, as well as to develop skills of intercultural communication. The authors analyze different types of games used in the educational process (business, role–plays, didactic, simulation games etc.), as well as the components included in the structure of the game activity (motivating, orientating, executive, monitoring, and evaluating.

Keywords: future marine engineers, intercultural communication, professionalism, readiness for intercultural communication, game simulation technology.

INTRODUCTION
The processes of globalization in today’s society lead to increased cooperation between countries, nations and their cultures. The international community is actively involved in integration processes by means of close cooperation between countries in various spheres of life such as labor and academic mobility, cultural exchanges and direct contacts between public institutions, social groups, scientific partnership, trade, tourism etc. Thus, the communication with representatives of different cultures is not just a reality, but a dire necessity today.

In the context of Ukraine’s entry into the world community, there is an urgent need to adjust the process of students’ career preparation to the global trends. The orientation of the future specialist to the practical mastering of at least one language of international communication is the principal task as it is the language that facilitates the establishment of international contacts and interaction with representatives of different countries, cooperation and understanding among foreign colleagues for sharing professionally valuable information and work experience.

This problem is quite important, especially, for future marine engineers in the context of international professional mobility as their professional activities are usually associated with the work as part of international teams. Thus, future marine engineers must be ready not only to fulfill their professional functions but also to have the ability to use the foreign language as a means of solving tasks, taking into account the specifics of intercultural communication. The experts emphasize that “inability to communicate provokes the high level of stress on board the ship, so the language factor has much more significance for mariners than their technical competence” (Kahveci, Lane & Sampson, 2002, p. 143).

The results of modern scientific research and practice prove that training of future marine engineers in higher educational establishments primarily focuses on acquisition of professional knowledge while knowledge of intercultural communication (an integral component of building a constructive dialogue, cooperation, tolerant interaction with representatives of different countries, ability to perceive and understand other cultural positions and values, views on intercultural communication as a method of subject–to–subject interaction in the multicultural environment) is often ignored.

THE AIM OF THE STUDY

Based on the above, we consider the readiness for intercultural communication as the necessary condition for the successful professional activity of marine specialists. In this context, there is a need for detailed study and analysis of the issues that are directly associated with the readiness of the future marine engineers for intercultural communication.

The purpose of the article is to analyze the formation of readiness of the future marine engineers for intercultural communication by means of game simulation technology.

THEORETICAL FRAMEWORK AND RESEARCH METHODS

The research into the various aspects of teaching readiness for intercultural communication in the system of higher education has been done by many scientists (O. Yefremova, O. Kovalova, L. Kondrashova, O. Leontyeva, A. Lynenko, V. Molyako, K. Platonova). The issue of readiness for intercultural communication of the future marine engineers is dealt with in the works of such researchers as F. Batsevych, H. Devyatova, V. Yeromina, A. Kozak, O. Krychkivska, N. Paperna, A. Sadokhin, M. Safina, A. Solodka, M. Sokolova, L. Yusupova.

RESULTS

The review of readiness of the future marine engineers for intercultural communication should be preceded by clarification of the concept of “readiness” in a broad sense. We should note that this concept is being explored by representatives of many sciences, including philosophy, psychology, sociology, social psychology, and pedagogy.

The analysis of various approaches to the interpretation of the concept of “readiness” allows to stating that the concept of “readiness” gets a specific content for every particular activity the students are trained in, and it embraces a complex system of personal qualities and traits that make specialists able to perform specific activities. Thus, the content and structure of readiness are determined by the requirements of specific activities.
A challenging task in the study of the concept of “readiness for activity/professional readiness” is the identification of its major components, in other words, its structure.

V. Slastyonin (Slastionin, 1993) suggested including the following components into the structural organization of the professional readiness: psychological readiness (the formed (with varying degrees) focus on the activity, orientation to work); scientific and theoretical readiness (availability of the necessary amount of knowledge required for competent professional activity); operational readiness (availability of the required level of professional skills); psycho–physiological readiness (availability of appropriate prerequisites for mastering the professional activity as well as personal qualities being professionally significant); physical readiness (compliance with health and physical requirements of professional work and professional performance).

They distinguish continuous and temporary readiness. The former includes the positive attitude towards a specific activity; adequate requirements to the activity; sustainable, long–term important features of perception, thinking, emotional and volitional processes; the knowledge and skills required in this functional area whereas the temporary state of readiness reflects the characteristics and requirements of the upcoming situation (Haysyna, 2004). The origination and formation of the temporary readiness are directly connected with such factors as the understanding of the task, understanding of the responsibility, the desire to succeed, the development of a plan of future work.

K. Platonov identifies in the structure of readiness three interrelated components: moral, psychological and professional readiness. The author underlines that moral readiness is connected with the socially conditioned side of a person; psychological readiness refers to the combined individual characteristics of mental processes; professional readiness is associated with person’s individual experience (Platonov, 1971).

The concept of “readiness” is also considered in the framework of the competence approach (J. Raven, H. Trofimova, A. Khutorskyi), which provides for the establishment of a new type of educational outcomes that cannot be reduced to the combination of information and skills but are focused on the ability and readiness of a person to solve different kinds of problems, to perform activities. These educational outcomes, called competencies, are regarded as readiness to solve complex real world tasks – professional, social, ideological, communicative and personal (Haysyna, 2004; Kozak, 2011; Slastionin, 1993). Thus, competence is considered to be the readiness and ability to work.

After analyzing the interpretations of the concept of “readiness”, we came to the conclusion that this concept covers the level of mastering certain activities, and includes a complex system of personal qualities of an individual that characterize his/her comprehensive harmonious development, readiness for productive fulfillment of specific activities and, consequently, social activities.

Before describing the concept of “readiness for intercultural communication”, it is necessary to specify the essence of the very concept of intercultural communication.

F. Batsevych, the author of the first Ukrainian dictionary of the most common terms of intercultural communication theory and practice, presents several definitions of the concept of “intercultural communication”. On the one hand, intercultural communication is “the process of communication (verbal and nonverbal) of people (groups of people) who belong to different national language and cultural communities, who usually use different idiomatic and ethnic language, and have different communicative competence”, and on the other hand, it is “the whole range of possible types of communication that happens outside the possible social groups (discourse systems), ranging from the groups whose members are representatives of different cultures to communication between men and women or colleagues of different ages etc.” (Batsevych, 2007, p. 82–83).

S. Ting–Toomey, a communication researcher at California State University, points out that the concept of “intercultural communication” is used to describe the communication process between members of different cultural communities (Ting–Toomey, 1999, p. 16–17). In addition,
she underlines that this term also includes the group interaction of such factors as beliefs, values, norms and scenarios of their interaction.

A. Sadokhin describes the concept of “intercultural communication” as a special form of communication between representatives of two or more different cultures or cultural communities in the process of exchanging information and cultural values (Sadokhina, 2014). The author emphasizes that the concept involves communication between cultures, races, ethnic groups, religions and between subcultures within large cultures.

Some researchers (Devyatova, 2002; Kozak, 2011; Safina, 2005) identify the following characteristics of “readiness for intercultural communication”:

– readiness for intercultural communication is defined as “a significant aspect of future specialist’s personal readiness to a full–fledged socialization, social interaction and self–fulfilment in society”;
– readiness for intercultural communication is a complex, multidimensional formation, which includes personal orientation toward intercultural communication, language competence, and communicative skills;
– readiness for intercultural communication is an integrative personal phenomenon that is manifested in a certain level of proficiency in a foreign language, linguistic–cultural orientations and communication skills.

Professional training of future marine engineers for intercultural communication is not always realized by them as an important condition for effective professional activities (Ting–Toomey, 1999). However, modern requirements of the leading shipping companies and crewing agencies include, in addition to the diploma of education or certificate of competency (COC), knowledge of foreign language (usually English), high level of communication skills and the ability to work in a multicultural crew. Thus, intercultural communication is becoming an important factor of successful professional activity of marine engineers.

Let us focus on pedagogical technologies, contributing to the formation of future marine engineers’ readiness for intercultural communication.

The majority of scholars interpret the concept of “technology” as the art of having hold of the process, a sequence of actions using the necessary means (materials, tools, the algorithm of actions) (Gladush & Lysenko, 2014, p. 101). Thus, the technology, in the procedural understanding, is called to answer the question: “How to bring the activities to best results (by what means)?

While the “pedagogical technology” is “a systematic category focused on the didactic use of scientific knowledge, scientific approaches to the analysis and organization of scientific process, based on teachers’ empirical innovation and focus on high results” (Gladush & Lysenko, 2014, p. 406).

S. Vitvytska emphasizes that every educational technology should meet the key methodological requirements, so–called criteria of adaptability, namely: conceptuality (to be based on some concept that contains philosophical, psychological, didactic and socio–pedagogical justification of educational objectives); consistency (to have all the characteristics of a system); the logic nature, integrity and interconnection of all system components; controllability (to be able to set goals, to design education and training process, to conduct phased diagnosis, to vary the methods and means of teaching and correction of knowledge and skills); the reproducibility, i.e. the possibility of being applied in other similar conditions and with other participants; the unity of content and procedural parts, their interdependence; efficiency, that is, the optimality of effort in order to secure a planned result, a certain standard of teaching (Vitvytska, 2006).

Therefore, we regard that the choice of technologies to achieve the goals and objectives, and in particular, to form readiness of future marine engineers for intercultural communication is conditioned by its contribution to the holistic improvement of the person’s activities, of his/her effectiveness, instrumentalism, and technical mastery.

It is important to underline that there are three types of situations of marine specialists’ foreign language communication according to the complexity and tension of the circumstances: ordinary, extraordinary and extreme (Kahveci, Lane & Sampson, 2002). The ordinary situations are
characterized by difficulties in communication associated with the exchange of “regular/periodic/systematic” information. The extraordinary are the difficulties in communication associated with the need of making an operational, heuristic and very often collective decision as the information received is not consistent with the standard option. The extreme circumstances are determined by the information of the unique nature, causing difficulties that require full mobilization of the entire team and demand skills necessary for joint social and professional activities. Thus, extraordinary and extreme situations are characterized by the situation unpredictability and the lack of time for taking instant decisions (Kahveci, Lane & Sampson, 2002).

We can conclude that readiness of future marine engineers to act in the above–mentioned types of situations will determine the success of their professional communication. Therefore, we regard simulation of the professional situations of foreign language communication as the necessary condition of the formation of readiness of the future marine engineers for professional communication in a foreign language, for intercultural communication.

According to many researchers (Gladush & Lysenko, 2014; Selevko, 1998; Slastenin, 1993; Fisenko, 2011) among the technologies allowing to simulate the real professional communication situations, there are game simulation technologies that are quite effective. It is necessary to pay attention to the definition of the concept of “game technology”. Most of the researchers (S. Honcharenko, N. Klarin, I. Lerner) consider this technology as a set of procedures, a specially built system of clear and effective actions aimed at the formation, expansion, and generalization of knowledge.

It is well known that every game has its particular structure.

G. Selevko highlights the structure of the game as an activity and as a process. The scientist singles out in the structure of the game as an activity: goal setting; planning; goal implementation; analysis of the results. However, he distinguishes in the structure of the game as a process such components as the roles that are assumed by the players; game actions as a means of implementing these roles; game use of items, substitution of real items by game items; real relationships between players; the plot (content) being the field of real activity reproduced in the game (Selevko, 1998, p. 52).

A. Savchenko focuses on such components included in the structure of the game activity as motivating (needs, motives, interests, desires that determine the willingness to participate in the game); orientating (the choice of means and methods of game activities); executive (actions, operations allowing to achieve the goal); monitoring and evaluating (correction and stimulation of play activities) (Savchenko, 1999, p. 191).

As there are different types of games used in the educational process (business, role–plays, didactic, simulation games etc.) and each of these types has its own implementation technology that affects the process of preparation for its implementation (game design) it is possible to say that there exist different game technologies (Kichuk, 2005).

Let us consider in detail the use of game simulation technologies in the process of preparing future marine engineers for intercultural communication in the course of “Foreign language”. According to recent studies, it is possible to distinguish the following features of game simulation technologies: the possibility for a future specialist to plunge into the environment close to real conditions; provision of the learning process with dynamism and expressiveness; reproduction of the subject and social content of the students’ future professional activity; formation of the system of relations typical for specialists in the relevant field (Gladush & Lysenko, 2014).

Therefore, we can state that game simulation technologies are modeling future professional activity of students; teach them how to act in certain real world situations.

Examples may be game simulation technologies aimed at making future marine engineers perform the following standard tasks: “Performing duties of watch keeping in engine room”, “Maintenance of the engine room” “Repairs”, “Work in emergency conditions” etc. The scenarios of such simulation games, in addition to plot events, describe the structure and purpose of the simulated processes, contain the lists of requirements for each role. Thus, these games train the tactics of behavior, actions, functions and responsibilities of a particular person. To conduct games
envisaging role playing there is developed the so-called “situational model” and the roles with “compulsory content” are distributed among the participants.

So, in the context of formation of readiness of future marine engineers for intercultural communication in the course of “Foreign language”, we can note that such game simulation technologies develop not only skills of foreign language communication but also skills of learning; skills that help future specialists develop their own professional algorithms of dealing with situations of various complexity and tension involving foreign language communication. This will help reduce uncertainty and anxiety of future professionals in such situations and successfully overcome intercultural communication barriers.

Note that the main difference between the game and practice is the fact that a simulation game, exists as an artificial entity limited by rules and conditions. Besides, during the simulation game each student is assigned an individual role in the group. The teacher performs the role of a mediator (Fisenko, 2011, p. 95–96).

Thus, a simulation game allows: first, to improve the skills of solving typical professional problems; to develop a comprehensive view of the future professional activity; to show the students the level of their preparation and his knowledge; o make instruction more individual. Modeling of time various episodes of professional activities with the help of simulation games permits the future marine engineers to develop traits and skills relevant for their further career basing them on the acquired knowledge.

CONCLUSIONS

The research conducted allows us to consider the readiness of future marine engineers for intercultural communication as part of their professionalism, as functional state and as a sustainable personal quality including the following aspects: orientation towards positive motivation to professional intercultural interaction showing respect to other cultures and traditions, dialogue, business cooperation, tolerance, the subject–subject interaction, empathy. The use of simulation game technologies helps to more effectively prepare future marine engineers for intercultural communication, as the search for solutions in the artificially–created problem situation, which is directly related to the future professional activity, allows developing students’ instrumental motivation to learn a foreign language in general, as well as to develop skills of intercultural communication.

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**PROFESSIONAL MOBILITY: PHILOSOPHICAL AND SOCIOLOGICAL ASPECTS**

**ABSTRACT**

In the article the problem of competitiveness of able–bodied citizens and their capacity for professional mobility have been studied. The professional mobility has been researched by foreign and Ukrainian scientists. The European scientists started empirical investigation of the mobility processes in the mid–XXth century. It has been found that the division of labor in the history of human society led to the emergence of professions and was the main (motivation) driving force of human progress. Due to it people started to differ from one another. Considering this fact, P. Kropotkin emphasized the future professionals’ need for the development of mobility. The basis for the study of such phenomenon as professional mobility is the research works of E. Durkheim and M. Weber. Functional approach to the analysis of professional mobility as a social phenomenon became the fundamental base of their research. Philosophers interpret the concept of “mobility” in terms of dialectic Law of the Development of Society, and sociologists distinguish the dynamism of
social development as the main factor that determines the nature and the content of social and professional mobility. It has been proved that among the able-bodied citizens who deliberately have chosen a certain profession and have mastered it, there are people who are forced to get training for a new occupation and pursue a different profession. The research results let us state that among these people there will be those who will not always be ready for professional mobility. Professional mobility has been described as a condition and a consequence of the professional division of labour according to the society needs by changing the profession or training for a new one and has been also considered as a change of employment position or role of the worker that is caused by the change of the place of work or profession.

Keywords: social mobility, professional mobility, profession.

INTRODUCTION

A rapid decrease in the living standard of the majority of Ukrainians, progressive polarization of the population income as well as the increase of the inequality of social opportunities for individuals from different groups, significant change in the criteria system for evaluating success and the growth of trends in the spread of non-institutionalized channels of social mobility have forced the reforms in Ukrainian economy which have been occurring over the past decades, and are accompanied by the increase of both social and professional mobility of the population. An important issue that worries researchers both in Ukraine and in other countries is a problem of competitiveness of able-bodied citizens and their capacity for professional mobility.

THE AIM OF THE STUDY

The aim of the article is to explore the problem of professional mobility in the philosophical and sociological aspects. The authors have defined the following objectives: to analyze the scientific and pedagogical literature, which highlights the different aspects of the problem under research in terms of philosophy and sociology; to define the essence of professional mobility in this aspect.

THEORETICAL FRAMEWORK AND RESEARCH METHODS

From the middle of the XXth century the study of empirical processes of mobility started in Europe (the United Kingdom, Sweden). The answers to the questions: how to conduct the research; which concepts to use; what statistics for the processing of empirical information to involve could be found in the works of American researchers (S. Lipset, R. Benedix, P. Blau, O. Duncan, D. Featherman, R. Hauser). According to P. Blau and O. Duncan, the empirical research of mobility should be focused on the analysis of the conditions that affect the professional achievements within a particular society.

RESULTS

The research papers written by E. Durkheim and M. Weber have become the basis for the study of such phenomenon as professional mobility. A functional approach to the analysis of professional mobility as social phenomenon has formed the fundamental basis for their research. In terms of this, the famous Russian philosopher and sociologist P. Kropotkin emphasized the need for the development of future specialists professional mobility. Having a high opinion of “Moscow education and training system”, which was developed by D. Sovetkin, the scientist pointed out that the system taught not only the professional skills but also the methods of work and presented the “general rules for studying a variety of crafts, knowledge of the general principles of machines, tools, labour procedures etc.” (Fields, Factories and Workshops, p. 170).

To assess the evolution of the “man – labour” relationship and characteristics of individualization of social behaviour E. Durkheim introduced the concept of “plasticity”, which reflects the ability and the capacity of individuals to shape their work, professional orientation and perspectives. The scholar describes as characteristic feature of “plastic” workers their continuous internally deterministic improvement of personal competitiveness as well as their ability to identify new professional opportunities and new forms of professional self-realization. Thus the evolution of the attitude towards the job led to the actualization of workers’ ability to shape the content of their professional role according to their own goals and opportunities. Following E. Durkheim’s
ideas, K. Marx, having carefully analysed the process of work itself, identified its crucial role in the life of an individual and a society, as well as its direct relationship with the process of professional mobility formation. K. Marx argued that “the division of labor within modern society is characterized by the fact that it creates specialities, separate professions” (Marks & Engels, 1970, p. 159). Employees of a certain profession form a professional group and members of this group usually have the same specialization and general business interests. A professional group is a wide socio-professional community that is included in the social structure of society.

The empirical research carried out in the United States of America and Europe in the middle of the twentieth century indicated the determinant role of professional achievements in the social mobility process. In their research work “Social Mobility in Industrial Society” American sociologists S. Lipset and R. Benedix define mobility as the movement of people who are engaged predominantly in mental work. It is also worth noting that thanks to these researchers the professional mobility has acquired the status of independent research subject. As a result, the necessity to define the concept of “professional mobility” has arisen. This notion appeared in the scientific literature in the early 1950’s of the last century. Originally it meant a change of various kinds of occupations or professions relating to the main types of works: physical, non-physical and farming. Regarding the professional mobility, the scientists believed that its essence could be clarified on the basis of the following empirical indicators: movement of “generation of children” in terms of physical, non-physical work and farming compared to “generation of parents”; assessment of the inheritance of prestigious and non-prestigious occupations (prestigious occupations were defined as those connected with non-physical work and non-prestigious work referred to physical work and farming); determination of the intensity of upward, downward, and total vertical mobility.

The concept presented by S. Lipsent and R. Benedix was one of the attempts to develop a theoretical model of professional mobility, however, some scientists (V. Novikov, in particular) argued that it had a number of significant drawbacks: the lack of consistent differentiation of professional mobility from other types of social mobility; the suggested research methodology did not determine an empirical criteria of professional mobility fully, being limited to stating just one criterion – that of changing the type of work; in this particular concept the authors did not pay much attention to the analysis of professional career within one generation.

Professional mobility is a prerequisite and a consequence of the professional division of labour according to the needs of society by changing profession or acquiring new profession and is considered a change in employment position or the role of the worker due to change of job or profession.

In the Soviet Union the main incentives for professional mobility were the scientific and technical achievements, which led to the emergence of new professions and necessity of advanced training. Nowadays the development of market economic relations is of great importance. The subjective aspect of professional mobility, which occurs when the change of employee interests results in making the decision to change the workplace or even profession, should be taken into consideration. To do this, a personality should possess certain qualities, namely: readiness and inclination to change the sphere of professional activity. So, as it has been found, professional mobility includes the following aspects: objective (scientific, technical and socio-economic conditions and the very process of changing professions), subjective (the change of interests results in the change of workplace or profession) and characterological (formation of readiness for professional mobility).

The further investigations of professional mobility in Western sociology in 70’s of the XXth century were conducted by P. Blau and O. Duncan. The scientists tried to develop a unique system of professional structure of society and to introduce the sophisticated statistical methods and procedures of professional mobility analysis (Duncan & Featherman, 1972). The researchers attempted to solve the problem of efficiency and fairness in the context of social mobility in American society. Special attention in the research was paid to the analysis of those conditions which affected the professional achievements and mobility within the institutional differences of a particular society. The use of multiple regression, which explores the impact of two or more
variables on a criterion, became an important achievement of the researchers. However, a
significant disadvantage of P. Blau and O. Duncan’s work was the fact that they did not disclose the
impact of social mobility on life style, psychological and cultural aspects.

In the 80’s of the XXth century there appeared a new generation of researchers (L. Jones, D.
Goldthorpe, R. Erikson, D. Featherman, R. Hauser, etc.) who dedicated their research to social
mobility. They focused on the comparison of social mobility of different generations. The scholars
believed that the factor of mobility, which indicates the unequal opportunities for different
generations, was not changing and remained stable in industrial societies for certain period of time.
The model of social mobility introduced by D. Featherman, L. Jones and P. Hauser gave the
opportunity to study the core samples of immobility and exchange between five professional strata.
As a result, they made the following conclusions: the low level of social mobility was appropriate
for top and bottom layers of the sample stratification levels; the most extensive mobility was
characteristic of medium and intermediate layers; on the top and the base of a social pyramid there
were strong protective barriers that emphasized the existence of boundary between upper and lower
classes; individuals had more or less equal opportunities for upward and downward mobility. R.
Hauser justifies the idea of “specific forms of mobility” that are characteristic of one type of culture
rather than of one type of society. The cultural interpretation of mobility was extended and
considered as one of the main characteristics of a certain, mainly western tradition.

In the 80’s of the XXth century there appeared the works of Soviet sociologists S. Makeyev,
A. Vyshnyak, V. Tarasenko, T. Zaslavskaya, R. Ryvkina and others, in which methodological,
methodical and organizational problems of studying social structure in dynamics were analyzed, as
well as research trends and directions of social mobility of different groups and segments of the
population were studied.

In the late 1980’s and early 1990’s foreign sociologists became increasingly interested in
professional mobility, and in research into its socio-cultural aspects, in particular. The most
significant generalizing research works were the works of B. Wagner, D. Goldthorpe, R. Erikson
and others. In their papers these scientists considered mobility as a set of elements of the inner life
of social subjects, united into a coherent system that provides the degree of subjective mobility
needed for the adaptation to the environment or to the active impact on it (Erikson, 1992).

In foreign sociology the research of professional mobility has its long history and systematic
character while in our country (particularly in the post Soviet Union period) the attention of
scholars to the study of professional mobility was paid only in the 1960s. Soviet scientists made the
main emphasis on studying labour and migration movements caused by the necessity to solve
socio-economic problems and the lack of efficiency of the existing labour distribution among the
places of social production, employment areas as well as inefficiency of workers’ mobility between
these places. The term “labour mobility” was first used by T. Zaslavskaya for analysing the processes
of labour changes in our country. The researcher treated this kind of mobility as the change of job
by workers: “Movement of workers from one job to another is a basic act of the many that make up
the global process of labor mobility” (Zaslavskaya, 1974, p. 17). Labour mobility, but for
movement from one workplace to another, also includes changes of skill levels, movement of
workers between different sectors of economy and territorial labour migration caused by the change
of occupation.

The different directions of social mobility, including its professional aspect have been
highlighted in several research works aimed at examining the labour migration and turnover of
personnel. Promotion of the employee to a challenging work due to his/her professional
development, continuing education and training, gained experience could be considered as “vertical
movement” or social evolution” (Kugel, 1983). The researcher A. Mudryk is of the same opinion.
He believes that “professional mobility is the promotion of individuals through various levels in the
hierarchy of employment provisions” (Mudryk, 2000, p. 189). In our opinion, this approach to the
interpretation of the concept of “professional mobility” does not reveal its essence and requires
more detailed and comprehensive study.

S. Kugel has described mobility as a complex concept that includes a range of different
components such as: parties, levels, criteria. The peculiar features of mobility are its versatility, multidimensionality and its multifaceted character. In our opinion, the author precisely determines the universality of this concept to eliminate the contradictions of educational process and provide the compliance with its logic (Kugel, 1983).

Considering professional mobility in terms of sociological approach, L. Lesohina has expressed the opinion that it should be viewed from different angles. On the one hand, it is a change of position, due to external circumstances (lack of jobs, low wages, household disorder, etc.). In this case mobility is induced by the necessity of people to adapt to real life situations. On the other hand, mobility can be seen as the inner self–development of an individual, based on ultimate values and the need for self–perfection.

While exploring the non–institutionalised tools of the development of professional mobility, O. Posukhova considered professional mobility of population as a social phenomenon and has associated it with social inequality. The scholar has explored professional mobility not through traditional institutionalised channels (determined by the law), but through non–institutionalised ones, namely: unlawful (intimate–personal tendency, personal protection and patronage, such as: association of people coming from the same area, ties of blood, dating, friendship, affiliation to the political elite etc.) and illegal channels. At the same time, having explored the issues of social movements, M. Rutkevich and F. Filippov concluded that in a socialist society as a result of radical changes of social–class structure the majority of actual obstacles to social movements had already disappeared, the nature and the social consequences of these movements as well as the character of those incentives that induce professionals to change their social status had been changed. The scientists have argued that social movement is one of the forms of gradual elimination of social differences, and vertical gradation exists so far as there is still inequality in terms of work complexity (Sushentseva, 2013).

In the early fifties of the XXth century famous sociologists (R. Benedix, D. Glass, H. Zetterberg, S. Lipset, S. Miller, G. White and others) introduced the thesis of “industrialization”, assuming that industrialization increases the possibility of upward social mobility for individuals from different social groups. They wanted to prove that the rate of social mobility in industrial countries was higher than in non–industrial ones. In their research the scientists (R. Benediks, S. Lipset, G. Zetterberh and others) recorded the move from physical to mental labor, from farming to industry, from executive to managerial work. But eventually their hypothesis was not confirmed, because it was found that the overall level of social mobility for different societies was almost the same. Most western sociologists consider an economic factor to be the dominant factor of social mobility, and today it has become the basic reason of mobility in Ukraine too, as nowadays wealth has become a recognised criterion of social success, social security and opportunity of enhancement to higher strata.

The development of innovative technologies in industrial society leads to the emergence of new professions, which, on the one hand, require high qualification and constant training, and, on the other hand, are well–paid and prestigious. As a result, the level of mobility is constantly increasing.

Social mobility is characterized by certain peculiarities, extent and trends in transformation of social structure and is defined by a complex of factors, such as: structural changes in the economy; changes in the system of employment; decrease in the standards of living of the majority of the population; social anomia (destruction of one value–normative system and the absence of any substitute); and social deprivation (restricting access to material goods). The study of mobility mechanism requires grouping of factors. Exploring the intra–generational social mobility in society of semi–open type L. Kansuzyan pointed out the significant determinants of social mobility at two levels: macro level (social class relationships, social policy, scientific and technical progress, socio–historical factor) and micro (class affiliation, social origin, political position, conditions of labor, industry, education and training; natural sub–layers such as gender and age). The scientist also distinguished three social groups according to the degree of mobility intensity: mobile; moderately mobile; immobile (Kansuzyan, 1993).
Thus social mobility is based on the combination of different types of relationships between an individual and the society (group, social stratum) that are formed under constantly changing conditions. Considering the fact that an individual plays a crucial role in the relationship of human and society a future skilled worker needs to be adaptive, communicative and tolerant. The activity and dynamics of an individual is determined by the movability and the variability of his/her internal state, i.e. socio-cultural mobility. Given the fact that social mobility is the initiator of social change and the driver of transformation from a potential being into real one, its actualization will encourage objective changes in the social position of an individual, changes of his/her social status, positions, roles etc.

Studying the category of “social and cultural mobility” from the standpoint of philosophy, Ivan Vasylenko notes that it is an important feature of social life that can be presented as a way of existence of the open nonlinear system formed by the interaction of social subjects, dynamic and static elements comprising constant and variable components.

The permanent elements of social life are such categories and concepts as mentality, social memory, individual spiritual core, stable “core” formed by the values of high rank. The dynamic elements include: “social change”, “social process”, “social dynamics”. Where the outer side of changes due to changes in the social system is reflected in the mutual arrangement of subsystems, we can speak of an objective component, but a subjective component is represented by the socio-cultural mobility of a personality which we are most interested in. Socio-cultural mobility is quite complex formation and represents a combination of the following components: practical thinking methods, ideological settings and holistic orientation of a person. All these components have different degree of freedom, i.e. degree of mobility. Therefore, socio-cultural mobility consists of changeable ways of practical thinking, ideological views and value orientations that are developing (Vasylenko, 1996).

Under existing conditions, the category of “mobility” obtains a wider meaning that provides understanding of the role (cultural, social, professional) that mobility can and should play regarding different qualification levels of a worker. Moreover, professional training should meet modern requirements of personal development, production, society and the state. Therefore, it is necessary to consider the category of “mobility” as the integral concept, not only in terms of anthropology and sociology but also in philosophical and psychological–pedagogical aspect.

The works of E. Durkheim, M. Weber, A. Shyutsa, M. Scheler and other scientists are the basis of the philosophical approach to the formation of professional mobility. In their works the scientists reveal the essence of “mobility” through the prism of the basic laws of dialectics. Gradual accumulation of quantitative changes and their transition at some stage in the fundamental qualitative changes ensure development. While quantitative changes are made through gradual accumulation, transition to a new qualitative state is carried out in the form of a jump. In the structure of mobility process this jump is represented as a break with the old and adaptation to the new. Knowledge of the above dynamic properties is the basis for predicting the nature of the profession.

The dialectical law of the unity and conflict of opposites plays an important role in understanding the essence of mobility. This law explains the source of transformation and the development of objects, processes and phenomena. The mechanism of implementing mobility in society is due to this particular law in resolving contradictions in the educational process. Thus, for example, qualifying mobility reflects not only the promotion of officials, but also describes the professional and industrial stability of an employee. This bilateral dialectical process organically combines such seemingly contradictory elements as employee’s competence and potential of vertical movement, on the one hand, and his/her possibility to “stay” in the profession or industry for a certain period of employment, on the other hand (Sushentseva, 2013).

CONCLUSIONS

Thus, philosophers interpret the concept of “mobility” in terms of dialectic laws of social development, while sociologists distinguish the dynamism of social development as the main factor that determines the nature and content of social and professional mobility. From the perspective of
social aspect the phenomenon of professional mobility is treated as an integral part of social mobility that is any individual or social object (value) transition from one social position to another. According to this, professional mobility is a change of an individual position in the vocational qualification structure of society; it is a position that individuals may occupy in society (as a rule, it is a sign of an open or closed nature of a particular society), and that is a change by an individual or group of individuals of one profession to another.

The study of vertical and horizontal professional mobility belongs to the perspective of future studies.

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THE PARADIGMS OF LEARNING AND TEACHING IN A TECHNICAL UNIVERSITY: AXIOLOGICAL ASPECT

ABSTRACT

The category of “learning paradigm”, approaches to the definition of this category, and the main modern paradigms of education (pedagogical, andragogical, acmeological and communicative) are considered in the article. The andragogical paradigm of guided learning and teaching, which is an important methodological basis of a person’s higher education (including
technical one) at all the stages of their development is substantiated and its potential is characterized in comparison with other learning paradigms. The systematic approach is used to present the objectives and the main ideas of this paradigm (autonomy of the institution and the student as the subject of study; the connection of the concepts “adulthood” and “education”; formation of the concept of “professional socialization” together with the concept of “social maturity”; the use of internal forces and the person’s aspirations for self-development, self-improvement as an activity basis; autonomy of the student and the university in the educational process; electivity of studies; participative character of training interactions), the principles of the andragogical paradigm (the priority of self-study; joint activities of the participants of the training process; the use of existing positive life/work experience; adjustment of the outdated experience and the personal attitudes that prevent the acquisition of new knowledge; individual approach to learning; electivity; reflexivity; the demand for practical training results; consistency; update of learning outcomes; personality development), specifics of implementation in terms of higher technical education (providing free access to information resources; ensuring individualized approach to learning; changing the roles of the educational process participants) and specifics of teaching activities in technical institutions of higher learning (being aware of the differences between the anthropocentric orientation of the teacher and the usual technocratic orientation of the technical specialist; being conscious of the state–of–the–art of sciences dealing with higher professional education; their orientation towards professional socialization of an individual).

**Keywords:** the paradigm of the guided learning and teaching, andragogy, andragogical paradigm, electivity of studies, autonomy, socialization, professional socialization.

**INTRODUCTION**

All the processes of studying and education are traditionally associated with pedagogy that has centuries–long history and developed theory of these processes. However, the experience shows that pedagogical principles, approaches to substantiation of the subject–matter of education, recommendations concerning the structure of learning and upbringing are mostly oriented to the general education school and are little applied in higher education institutions.

Experienced higher schools teachers who have scientific degrees in certain technical specialties, being the heads of the departments and higher educational institutions, thanks to their long practice, have realized the necessity to create the scientific basis for training higher school teachers, and are trying to generalize their experience in organizational and methodological monographs (Zinovyev, 1962; Zmeyev, 1995). The development of the higher school didactics is usually dealt with by the specialists who got training in pedagogical higher schools and teach there (Arkhanhelskii, 1974; Arkhanhelskii, 1980; Zazikin & Chernyshev, 1995). These specialists usually have pedagogical beliefs that were formed in the process of learning school pedagogy, and they are most often oriented to pedagogical higher schools.

**THEORETICAL FRAMEWORK AND RESEARCH METHODS**

The analysis of the experience and needs of modern higher school and technical higher school, in particular, shows the necessity of studying and taking into account the existing paradigms of the guided learning and teaching, revealing their didactic and social and pedagogical potential, possibility and expediency of their use at different age and learning stages (Yu. Fokin), the relevancy and potential of the andragogical paradigm of training (M. Vershlovskyi, N. Hromkova, S. Zmeyev, N. Klokar, I. Kolesnikova, L. Naboka, V. Puntsov, L. Sigayyeva, S. Protasova, E. Starobynskyi, O. Tonkonoga, I. Yakuhno and others). On the basis of structural (V. Slastionin, N. Talyzina, N. Udalov), functional (V. Antypova, N. Kuzmina, N. Levitov), systemic (V. Bespalko, I. Blauber, B. Markaryan, V. Polyakov), dynamic (Z. Yesaryeva, N. Svirydova), personality oriented (K. Bondarevska), the general issues of the learning theory in higher school are analyzed (S. Arkhangel'skii, A. Verbyts'kyi, Ye. Knyaze'va, L. Ruvinskii); the problems of the theory and practice of pedagogical education and its andragogical element are investigated (O. Abdullina, Ye. Byelozertsev, Ye. Bondarevska, H. Heller); the peculiarities of the higher school teachers activities are revealed (B. Ananyev, N. Kuzmina); the characteristics of the professional
training of higher school teachers and improvement of their pedagogical culture are dealt with (L. Makarova, V. Molchanovskyi, I. Radchenko, H. Skok); the methodology of forming competence in the analytical work of scientific and academic staff is theoretically grounded and developed (O. Yarykhin).

Today we can say that there are a number of education paradigms, the most common among them being traditional–conservative (knowledge), rational (behavioral), phenomenological (humanistic), technocratic, non–institutional, humanitarian, learning “by discoveries”, esoteric paradigms. They are different in their approaches to the choice of education’s main aim, understanding of the role and purpose of education in the system of social institutes, its vision in the system of a person’s preparation for life, formation of general and professional culture of the younger generations. However, two main holistic and systemic paradigms have been shaped in modern education: forming (traditional) and personality oriented (humanistic). The forming paradigm in its turn splits into two types – knowledge–oriented and activity–oriented approaches to the content and technologies of education.

Consideration of modern education paradigms and approaches to its organization allows us to make a conclusion that today education for a person is not only obtaining a certain amount of knowledge, abilities and skills, but also being psychological ready to its continuous accumulation, renewal, alteration, in other words – to continuous self–study, self–education, self–development and self–perfection. The mentioned paradigms exist in the system of education, the global object of pedagogy, as they unite the processes of training and education, being internationalization of those social and cultural values of a society that are shared by its members.

Taking into consideration the diversity and at the same time consistency of the existing paradigms of the guided learning and teaching, M. Nikadyrov yet in 1974 vividly characterized the methodological drawbacks of the works in this field when he edited one of the textbooks for higher school (Arkhanhelskii, 1974): “…The author refers to the “classic” theory of learning… i.e. actually to the didactics of the general education school, to the experience that has been accumulated in the centuries–long practice. Certainly, it is a correct approach, though… a very important question of methodological character is neglected: to what extent can the findings and recommendations made for general education school be extrapolated to higher school” (General and professional pedagogy, 2009).

**THE AIM OF THE STUDY**

The aim of the article is to analyze the axiological aspect of the category “learning paradigm” and to substantiate the expediency of applying the andragogical paradigm in higher technical education.

**RESULTS**

The fact that till the middle of the XXth century it was considered that after the age of 20 a person became less able to learn made pedagogy and pedagogical psychology develop mainly as children’s pedagogy and psychology. In the 60s of the XXth century B. Ananyev stood against this and put forward the idea about the necessity to investigate a person’s psychic dynamics in mature age and the peculiarities if person’s learning at different stages of life.

The term “paradigm” (from Greek “paradeigma” – pattern, example) means precise scientific theory embodied in the system of concepts that express the most essential peculiarities of reality. Its second meaning is used to characterize the generally recognized scientific achievements that supply the specialist community with the model of problem formulation and its solutions for some period of time. It is just in this sense that it is used in the pedagogical theory to indicate the conceptual approaches to education (N. Savotina, M. Skrypnyk). The paradigm in pedagogy means: 1) “…the initial conceptual scheme, the model of problem formulation and its solutions, research methods existing during some historic period”; 2) “… a theory (or model, type of the problem formulation) accepted as a pattern of solving research problems” (Starobinskii, 1997).

The question of clarifying of the pedagogy paradigm remains relevant today.

It is natural that each paradigm is based on a certain conception.
The conception is: 1) “... a certain way of understanding, treatment of any notions, the main point of view, the guiding idea for their clarification; 2) the leading idea, the constructive principle of different activities” (Shadrikov, 1993); 3) “...the system of beliefs, a particular understanding of phenomena and processes” (Fokin, 1993).

The conception is a certain (adopted and consistently implemented) view on the studied processes and phenomena, a certain approach to solving the problems the specialist considered. Yet A. Einstein said that the future of humanity depends not so on scientific and technological progress as on the moral foundations of society; and the scientific and technological revolution has shown that the problems associated with application of the scientific results is not the problem of the science, but more the problem of ethics, morality and politics. As an illustration of the traditional conceptual approach to the problems of higher technical education there can be considered the documents of Technical Academy (1844), later the Polytechnic School (1877) and Lviv Polytechnic (since 1920) as well as the main principles of the “Notes to founding St. Petersburg Polytechnic Institute” developed in the early XX century.

Analysing the characteristics and conditions of education and training in secondary and higher schools, we cannot but conclude on the need of using different learning paradigms in these fields. Only as a result of a comparative review of school, university and other teaching situations four different paradigms of learning were identified: pedagogical, andragogical, acmeological and communicative. Each of these paradigms of the guided learning and teaching of the objective human experience has its own theory of education and learning, or the theory of the guided learning and teaching.

The pedagogical paradigm is a set of approaches to solving the problems of education and training, which is used by traditional pedagogy and is focused essentially on secondary school, on education for children yet unable to understand their needs and realize that education realizes one of their personal fundamental life needs. The name of this paradigm, as well as pedagogy itself, comes from the Greek words “paidos” (child) and “ago” (lead), the combination of which literally means “child leading”.

The teacher’s activity corresponding to this paradigm is focused on upbringing, development, strictness, knowledge transfer, prescription, compulsion, daily tasks and their control. Means of activation are interest and focus on the interest. With such approach, the student is inevitably in the position of an object of guided learning and teaching that can lead to passivity, the desire of students to try not to get failing grade, the loss of interest.

The desire to find a new paradigm was manifested quite steadily at different stages of social development. It is embodied in the works of V. Sukhomlinskii, V. Shatalov, M. Shchetsin, Sh. Amonashvili (Amonashvili, 2000) and other teachers–innovators of the second half of the XX\textsuperscript{th} century, in developing pedagogy of cooperation, calling for turning education to personality development. Recently, the emphasis is put on orientation of education on “the person of culture”, which is going to replace the former orientation to “the person who knows” (Zahvyazinskii & Gritsenko, 1978, p. 58).

Although andragogy appeared as part of pedagogy focused on adult education by school type (in the interpretation of theorists, andragogy is aimed at revealing patterns, social and psychological factors of effective education, training and teaching of adults (Starobinski, 1997), the main difference of andragogical approach is the subject’s understanding of his needs that are satisfied in the process of getting education and his conscious activities directed at satisfying these needs, or, according to M. Smyrnova and E. Starobynskyi, inclusion of the specialist in the process of understanding his personal and professional goals through their correlation with the aims and values of modern life as well as his own needs, demands, and expectations (Fokin, 1994; Yakunin, 2000). S. Vershlovskyi focuses on the fact that “... adult education is effective to the extent to which there are created conditions that help to critically assess their experience and understand the essence of the role of knowledge in a broad social aspect” (Vykhrushch, 2015, p. 10). Thus, the main purpose of the andragogical approach is the person’s socialization. Socialization is 1) qualitative and quantitative changes of the system of values, socially important beliefs and attitudes, value
orientations, ideals, moral qualities of a personality necessary to be a success in the society and which are achieved in the process of an individual’s own activities; 2) the process of learning and active reproduction by an individual his social experience, the system of social connections and relationships in his own experience (Shadrikov, 1993).

This paradigm considers social development and identity formation only in the process of self–conscious activity, and not as a result of external spontaneous influence. The guideline of andragogy, unlike traditional pedagogy, is that the student and not the instructor play the leading role in the learning process. The function of the teacher in this case is to assist the individual in identifying, organizing, formalizing the personal experience, adjusting and updating the student’s knowledge. So higher education is focused on socialization (professional socialization). Since in this case the subject tries to get vocational education necessary for successful work in a given society, the guidance of learning and teaching inevitably focuses on current social norms with which the education recognized by the society complies. In the process of socialization a person acquires qualities, values, beliefs, socially approved behavior needed for normal life and work in this society. Taking into consideration such peculiarities of higher education the function of the teacher and the priorities of teaching methods change (the latter become active in nature due to the factors related to learning motivation and need sufficient level of student’s socialization).

The main category of the acmeological paradigm is self–realization. In this case, neither the result of this activity and the way to the top nor the scale for measuring the progress achieved in the process of professional training can be specified by the society: they are the product of the activity and the function of abilities of the subject himself in case he has chosen the acmeological way for the development. In professional acmeology, aimed at achieving the top professional skills by the student, independence from the standards recognized by the society is relative: a student has to focus on the existing professions, for which he has abilities and inclinations. Considering this, there was created acmeology, the basics of pedagogy for adults, it being an interdisciplinary field of knowledge about man in adulthood. Thus, the pedagogical science covered all the three major stages of human life: childhood (pedology), adulthood (acmeology), senility (gerontology). In the 90s of the XXth century prefix “acme–” began to be considered as the top (the highest level of achievement of something) of human development based on full implementation of the person’s capabilities and opportunities. This led to the appearance of the field of professional acmeology (Zinovyev, 1975; Nikandrov, 1974). At the same time, the scientific discipline of andragogics associated with adult learning is actively developing (Zmeyev, 1997; Kuzmina, 1991; Yaksa, 2014). All these require differentiation and coordination of the acmeological and andragogical approaches in considering phenomena and problems of higher education.

The acmeological paradigm focuses teaching efforts on helping the student reach the top of his capabilities, the fullest realization of his personality’s potential. In acmeological works, achievement of the top professional skills by the student is considered the main purpose of this paradigm (Zinovyev, 1975). This was quite natural during the times when education was focused on preparation of the specialists that were demanded by the state and when professional education was viewed as the major value. However, with this approach the acmeological paradigm also focuses on social norms and actually duplicates the andragogical one. This field can be called professional acmeology.

The communicative paradigm is a paradigm of peer teaching which is realized when the subjects of didactic interaction, every of whom is aware of his needs and is competent in his particular subject area, exchange their achievements for the rapid dissemination and application of the new information and experience. A characteristic feature of this study is the active participation of the subjects’ of didactic interaction in selection of the study objects and it implies the transition of the subject of learning into the subject of teaching and vice versa.

Unlike other paradigms, where the selection of the objectified human experience is done mainly by teachers and society instead of students, the communicative paradigm implies cooperation of the equally competent partners in the training process, they both being able to objectively evaluate the significance of possible objects of learning and to exchange the roles
depending on the purpose, i.e. to become either the object or the subject of training. Self–improvement is the main category of the communicative paradigm, when new elements of the objectified human experience are acquired by each individual; individuals as the subjects of training interact with each other with the aim to enrich the experience of each participant and exchange knowledge and skills.

The main reason for the higher school teachers’ claims to traditional pedagogy is associated with the fact that while implementing just one training paradigm (pedagogical or school) it does not specify the restrictions (didactic, age, communicative, professional) on application of its provisions. As the result, traditional pedagogical textbooks fail the expectations of the teachers of technical and other non–pedagogical universities because in them teachers cannot find scientific pedagogical assistance for improving teaching practices in higher educational establishments. “Targeting knowledge and the basics of sciences has apparently exhausted itself and has brought pedagogy to a standstill ... Today... in the process of training it is necessary to form skills and teach the generalized work methods. The students’ intellectual activities should be developed rather than their knowledge of the subject area enriched” was emphasized in the discussion on the training strategy in 1988 (Andragological basics of studies of pedagogical staff in the process of training). Its participants saw the causes of the crisis of education in its being oriented to the past, to something already achieved by mankind (according to the terminology of “The Roman Club”, the education crisis was provoked by “supportive studies”) while there is a necessity in innovative training focused on the future.

The former strategies and policies for the development of higher education, including those proposed by UNESCO; do not bring appropriate outcomes. In the work “Philosophy of Education for the XXIst Century” it is stated that “… to overcome the global crisis of higher education, as well as its manifestations at the regional and national government levels, requires rethinking of the initial ideas about the nature of international educational practices, about the goals and values of training and education, their content and methods”. Thus, according to many representatives of the higher education, it is about creating a new philosophy of education adequate to the challenges of the XXIst century. In the collective monograph “Philosophy of Education for the XXIst Century: Collection of Articles” (Moscow, 1992) as well as in the works of B. Hershunskyi, S. Hessen, E. Husynskyi, V. Shadrikov, the current state of society is reflected. In the interpretation of the director of the European Center for free time and activities I. Savytskyi the philosophy of education is a certain system of ideas about the world and the man’s place in it, on the basis of which it is possible to identify the goals of education, its content structure, basic organizational principles, relationships between a teacher and a student etc. and, therefore, the dominant of training (the term of I. Lerner).

In the report on the results of the international symposium “Philosophy of Education in the Perspective of the XXIst Century” it is stated: “The crisis of education has turned into a global phenomenon, the failure in the implementation of the adopted earlier policies and strategies for introduction of educational reforms has highlighted the philosophical understanding of the situation. It is impossible to achieve the goals in the field of higher education put forward at both international and national levels without the development of new conceptual, methodological and axiological approaches”.

The problem of designing the educational process on the efficient paradigm basis is particularly acute in higher technical educational establishments. Since 1972, International Society for Engineering Education (IGIP) is operating in Europe. Having been established in Klagenfurt (Austria), it is actually the European Association of teachers of technical subjects in higher school. The International Society for Engineering Education maintains the Register of European teachers of engineering universities (Der Europaische Ingenieurpadagoge, The European Engineering Edukator, ING–PAED IGIP), the enrollment to which occurs on the submission of the national associations and is confirmed by the issuance of a corresponding certificate. The candidate for the certificate “European teacher of engineering higher school” should be a graduate engineer, have at least two–year experience of engineering or scientific and technical activities, successfully work as a teacher in higher school for at least one academic year, speak one of the common European
languages, as well as undergo a series of teacher training, which is not inferior in terms of content and volume to the minimally sufficient IGIP program requirements (General and professional pedagogy; Andragogical basics of studies of pedagogical staff in the process of training).

Detailing requirements for the technical specialist, in 1992 the World Congress on Engineering Education adopted the following requirements for the graduates of engineering higher school:

− professional competence (a combination of theoretical knowledge and practical training of a graduate, his ability to carry out all types of professional activities defined by educational standards in the field of study or in a particular specialty);
− communicative readiness (proficiency in literary and business written and spoken language; competence in at least one of the most widely used foreign language, skills to develop technical documentation and use it, the ability to use computers and other means of communication including telecommunication networks, knowledge of psychology and ethics of communication, skills of professional group or team management);
− developed capacity to have creative approaches in solving professional problems, the ability to navigate in unusual circumstances and situations, to analyze problems, situations, tasks, and develop action plans; commitment to plan and the responsibility for its implementation;
− stable, conscious, positive attitude to one’s profession, desire to continuous personal and professional development;
− knowledge of the methods of technical and economic analysis of production with the aim of its rationalization, optimization and renovation, as well as methods of ensuring ecological production and engineering environmental protection;
− understanding the tendencies and main trends of science and technology development (General and professional pedagogy).

The outlined requirements for graduates of engineering higher educational institution may be provided in compliance with the basic principles of andragogy: priority for self–study, joint activities of the subjects of the training process, use of the available positive life experience, adjustment of the obsolete experience and personal settings that prevent the development of new knowledge, individual approach to training, electivity, reflectivity, the demand of learning outcomes by the practical activity, systematization, actualization of the learning outcomes, personal development. N. Yaksa specifies the following system of educational principles within the andragogical paradigm: the priority for independence training, relying on the student’s experience, individualization, systematization, actualization of the learning outcomes, electivity, the context–based study (Yaksa, 2014).

Based on the nature of the main principles of higher technical education the peculiarities of the andragogical paradigm can be specified as follows: the autonomy of the institution and the student as a subject of study; close connection of the concepts of “adulthood” and “education”; formation of the concept of “professional socialization” together with the concept of “social maturity”; the use of internal forces and human aspirations for self–development, self–improvement; autonomy of a student and a higher school in the educational process; electivity in training; participatory educational interaction.

The idea of autonomy of the higher school and the student as a subject of educational and professional interaction involves flexible organization of educational processes that focuses on student’s freedom of choice of the further educational trajectory while maintaining the emergence of education in general.

The essential feature of the autonomy of the educational process is “to ensure freedom of choice”, i.e. to ensure the freedom of students to choose and refine their educational trajectory, i.e. to freely choose subjects, order of priority and duration of mastering their content. A. Andreyev says that ensuring freedom of choice implies the existence of a number of features of the future system of open higher education, among which the most specific are:

− providing free access to information resources;
− providing individualized approach to studies;
− changing participants’ roles in the educational process (Andreyev, 2000).

The possibilities of really free choice must be organizationally provided to students at the end of each semester or academic year.

As for higher education establishments that operate in the domestic realities, it is efficient to consider such a structure not as an alternative to existing one, but as an additional one prevailing in universities, where teachers focused on the traditional system can work successfully. If the university has such structures, the conditions for self-organization of all the elements of the university will be created, the components of the structures that will be elected by a large number of students will develop.

The andragogical paradigm of the guided learning and teaching involves fundamental changes in the professional identity of teachers of technical higher schools: awareness of the differences between the anthropocentric orientation of the teacher and the usual technocratic direction of the technical professional, understanding the current state and peculiarities of the sciences about professional higher education, their orientation to the individual’s professional socialization.

The philosophical distinction and the essential consideration of cognition and acquisition of others’ objectified experience are necessary to clarify the importance of training and education of the individual in the progress of mankind. Unlike traditional pedagogy, this meaning is not declared and is derived from the consideration of the objective needs of the individual and society and their satisfaction: empirical cognition of the objective world is gradually complemented by other types of knowledge, accumulating results in the objectified social and professional experience available to other people. Mastering these results accelerates the specialist’s development, since it deprives him of the simple repetition of what has already been comprehended by the predecessors. On this basis, some philosophical statements that are benchmarks for a teacher are introduced:
− shows the teacher the actual existence of different paradigms of education and the differences between the andragogical paradigm (characteristic of higher school) and traditional pedagogical (school) paradigm;
− introduces the need to take into account the andragogical paradigm for conceptual rethinking and synthesis of the specialty theory;
− promotes the concept of unambiguous simple definitions to develop logically consistent theory of learning in higher school.

The adoption of the andragogical paradigm of the guided learning and teaching in higher technical school allows specifying and directing activities of higher technical school teacher towards professional socialization of the future specialist.

Experience shows that without considering these issues, without finding out the differences between the paradigms, the further study of definitions and statements of the andragogical theory of learning in higher school will not meet understanding on behalf of the higher school teachers as they think that the foundations of the educational process organization in higher school have already been presented in traditional pedagogical textbooks.

An important aspect of the andragogical pedagogy is the awareness of the fact that to maximize the achievement of its objectives it is necessary to separate adults by different age categories (generations). Social science differentiates three age categories: under 25, from 25 to 45, over 45. Each age category requires additional research on the ways of implementation of the andragogical paradigm and development of the adapted technologies of the guided learning and teaching with regard to their age specifics and potential, prediction of goals, approaches, adequate methods and forms of study.

The first category is divided into two groups: people who have and have no professional education. Respectively, people of the first group should be given an opportunity to obtain such education so that they are involved in professional activities in specially organized production training classes. Conditions for professional development should be created for the second group.
The second category has professional education and working experience; targeted professional development, realization of personal potential within the andragogical paradigm of the guided learning and teaching are relevant for this group.

The third category of adults, despite the fact that it has reached a certain social and professional status, also requires continuous, adaptive study, but this study in many cases is impossible without the interaction with the first and the second categories, and therefore without interactive learning.

Unfortunately, there is lack of such scientific research. However, the society oriented to the andragogical paradigm of learning foresees activation and professional socialization of future specialists (giving them increasing opportunities to demonstrate individuality) and is objectively interested in implementing the andragogical paradigm of the guided learning and teaching in order to enrich educational and professional opportunities for each person, to increase recognized by the society levels and features of training technical specialists.

CONCLUSIONS

Pedagogic sciences seem incomplete without training and education theories developed on the basis of all the above paradigms, they cannot be perceived as sciences dealing with the guided learning of the objectified experience of mankind by an individual, though actually the guided learning is the very process at which every pedagogical science is aimed.

The theory of higher education like the rest of higher school didactics should implement the andragogical paradigm of the guided learning in its optimal combination with the key ideas of the acmeological and communicative paradigms. Only then it will be possible to take into account the specifics of higher education and to provide a scientific basis for both solving the problem of specifying a set of specialties, synthesizing the content of higher education for specific professions and the high school teachers’ acquiring skills of managing students’ learning activities.

The andragogical paradigm of the guided learning and teaching in higher technical school will scientifically prove the requirements for modern educational process and identify the patterns in combined tasks that provide easing the students’ information overload, transfer teaching from the level of informing and technologizing to the level of real management of development, socialization and professional development of training subjects. It creates new conditions for conducting each lesson, for teacher’s conscious choice of methods, forms and means of learning, that take into account the specific objectives of higher technical education. The theory of higher technical education should be developed on the basis of the combination of the acmeological and communication paradigms with the leading role of the andragogical paradigm of learning.

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