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COMPARATIVE ANALYSIS OF PEDAGOGICAL TECHNOLOGIES IN THE CONTEXT OF FUTURE AGRARIANS' MULTICULTURAL EDUCATION IN THE USA

ABSTRACT

In the article the comparative analysis of pedagogical technologies in the USA has been carried out in the context of future agrarians' multicultural education. The essence of traditional and innovative pedagogical technologies and the peculiarities of their realization at higher educational establishments are viewed. The expediency of developing the pedagogical technology of forming future agrarians' multicultural competence is reasoned. The classification of pedagogical technologies is presented according to the level of application; the philosophical basis; the scientific conception of mastering the experience; the orientation on personality's structures; the nature of modernisation of the traditional teaching system. The possibility of their determination is also considered due to the aims and tasks, the organizational forms, the dominant methods of teaching, the approaches to the personality, the category of students, the type of cognitive activity's organization and management. The special attention is paid to two directions of the education's development – traditional and innovative. The educational process in the American post-industrial, inform society and its attributive characteristics are described is substantially determined by a personality factor, pushing off from this, exactly the value of personality must serve as an initial moment in organizing the system of higher professional education. Here are two directions of the education's development – traditional and innovative.

The practical aspects of implementing the traditional pedagogical technology, the technology of developing teaching, the programmable teaching technology, the problem-solving teaching technology, the module teaching technology, the concentrated teaching technology and the distance teaching technology are viewed.

Key word: *pedagogical technology, professional training, future agrarians, traditional teaching, module, democratization, personality-orientated approach, methodical classification.*

INTRODUCTION

Nowadays the world springs up as a single economically-technological and historically-social multicultural system. Taking this into consideration, in the view of modern economic tendencies our state requires from a future agrarian competence, civil erudition, respect to the human rights, tolerance, ability and wish to find a compromise, constructive cross-cultural interaction.

In the "National Doctrine of Education Development of Ukraine in the XXI Century" it is declared, that "the state must provide upbringing a man of democratic outlook, who adheres to the civil laws and freedoms, treats with respect to traditions, cultures, religions and languages of the world" (The National Doctrine of Education, 2002). Thus, training specialists able to realize professional activity based on humanistic and democratic principles, national acquisitions of the world value and established European traditions, to implement educational policy of the state is determined as the chief task of the educational system.

In this context the question of agrarians' professional training at higher educational establishments, forming the young generation's willingness to function positively in the modern world, the attributive feature of which is multinational and multiethnic composition, appears especially actual. The solution of this question envisages forming future agrarians' multicultural competence, which we consider to be integrative formation, presented by the unity of cognitively-gnoseological, motivationally-value, personality and operational components, which makes adjusting of the productive cross-cultural interaction with the representatives of various peoples, ethnic and cultural groups possible. A rather important point in our research for successful forming future agrarians' multicultural competence is studying the advanced experience realized in the USA.

THE AIM OF THE STUDY is conducting the comparative analysis of the pedagogical technologies' advantages and disadvantages in the context of future agrarians' multicultural education in the USA.

THEORETICAL FRAMEWORK AND RESEARCH METHODS

The researched issue is presented by scientific works of G.Attwell, L. Baltazar, F.

Banks, A. Bates, G. Dudeney, S. Hennessy, J. Hughes, R. McCormick, G. Motteram, G. Nicholls, K. Noga, M. Radnovski, E. Ropo, J. Stewart, V. Wilkerson and others. In our research we have used such general-theoretical scientific methods as analysis, synthesis, induction, deduction analogy and comparing.

RESULTS

The most various teaching technologies are viewed in modern didactics of the USA. They are classified according to *the level of application* (general pedagogical, subject, module); *the philosophical basis* (materialistic and idealistic, dialectical and metaphysical, scientific and religious, humanistic and inhuman, anthroposophical and theosophical, pragmatic and existentialistic); *the scientific conception of mastering the experience* (associatively-reflective, behavioural, developing); *the orientation on personality's structures* (informative – forming of the knowledge, abilities and skills; operating – forming of the mental actions; emotionally-artistic and emotionally-moral upbringing of moral and aesthetic spheres of personality; heuristic – developing of creative skills; functional – forming of the activity-practical sphere); *the nature of modernisation of the traditional teaching system* (technologies of activating and intensifying students' activity; technologies on the basis of humanizing and democratizing relations between a teacher and students; technologies based on the didactics reconstruction of the educational material and so on) (Motteram, 2013).

Pedagogical technologies are also determined depending on the aims and tasks, organizational forms, dominant methods of teaching. *As for the approach to a personality*, technologies fall into authoritarian, didactic-centric, personality-orientated (anthropocentric), humanely-personal, interactive, free education and others like that. *As for the dominant method:* dogmatic, reproductive, explanatory-illustrative, programmable teaching, problem-solving teaching, developing teaching, self-developing teaching, dialogic, communicative, playing, creative, information, computer technologies. *As for the category of students:* the mass (traditional) technology, aimed at an average pupil; the technology of advanced subject studying; technologies of compensative studying (pedagogical correction, support, brushing up and so forth); victimological (audio-, ortho-, typhlo-, oligophrenic pedagogy); technologies of work with difficult and gifted students. *As for the direction of modernising the current traditional system:* on the basis of humanizing and democratizing the pedagogical interaction, on the basis of activation and intensification of students' activity, on the basis of the organization's and control's efficiency by the educational process, on the basis of methodical improvement and didactics reconstruction

of the educational material, nature-reasonable, alternative, integral technologies of authorial schools (Banks, 2013).

An educational process in the post-industrial, inform society is substantially determined by a personality factor, pushing off from this, exactly the value of personality must serve as an initial moment in organizing the system of higher professional education. Here are two directions of the education's development – traditional and innovative.

The traditional pedagogical technology is oriented to transfer knowledge, abilities and skills. It provides mastering didactic material, checking and assessing students' knowledge's quality at a reproductive level. Presently this type of the pedagogical technology is the most widespread. Its essence lies in teaching basing on the scheme: *studying new material – understanding – control – assessment*. Thus explanations in combined with the use of visual methods, leading types of students' educational activity – listening comprehension, summarizing and memorizing are viewed as the main teaching methods. The chief requirement and central criterion of efficiency is a faultless reproduction of the studied.

This technology has a number of advantages: economy, availability in understanding difficult educational material by students, effective pedagogical process management. At the same time traditional technology has got certain weak points: little possibilities for differentiation and individualization of the didactic process, and does not develop young people's mental potential in a rather sufficient way (Attwell, Hughes, 2010).

Among the perspective pedagogical technologies *the technology of developing teaching* springs up. To L.Vygotskyi's point of view (Vygotskyi, 1991), pedagogy must not be oriented on a yesterday's, but on tomorrow day. He created the concept "zone of the nearest development", whose essence lies in the following: on the certain stage of their development students can solve educational tasks independently under the direction of a teacher or in collaboration with more experienced groupmates. L.Zankov (Zankov, 1999) also sticks to this point of view and sees a key role in the principle of teaching at a high difficulty level and stimulating students' reflexion.

Although the ideas of developing teaching have enjoyed great popularity in our country, however few positions of this technology remain debatable. So the research conducted by the Institute of the Academy of Sciences has confirmed, that young people with innate slow dynamic characteristics are doomed to inevitable difficulties in work at one speed-up rate for all group. Therefore it is impossible to teach all students quickly and

at high level of difficulty.

Since the middle of the 60s of the XX century scientists began actively to work out *the programmable teaching technology*. The programmable teaching technology is a technology of independent individual teaching with the help of a beforehand worked out programme and special means (a programmable textbook, a computer). Attributive characteristics of the programmable teaching technology are: breaking-up of the educational material on separate small, memorisable parts; 2) including the system of instructions in successive implementation of certain actions; 3) verifications of understanding every part; 4) having solved the test tasks correctly, a student gets a new part of material and undertakes the next step in studying; 5) giving a wrong answer, a student gets additional explanations from a teacher; 6) the results of the test control are fixed and become accessible to both the students and the teacher (Noga, Radnovski, 2008).

The problem-solving teaching technology contemplates organization of students' independent searching activity under the teacher's direction. In a general way the problem-solving teaching technology can be represented so: a teacher does not report knowledge in a ready-made form, but introduce a task to students, awakes their interest, wakes up a desire to solve it themselves. Students investigate the ways of solving the problem, offer a hypothesis, circle and discuss the methods of checking its correctness, argue, carry out experiments, supervisions, analyse their results, reason, prove their viewpoints.

The problem-solving teaching technology has such advantages: it contributes not only to the students' mastering the necessary system of knowledge, abilities and skills, but also achieving a high level of mental development, forming the capacity for self-studying, creative activity, develops interest to intellectual labour, provides solid educational results. The disadvantages: it can be realized only on the material of high level meaningfulness, that assumes ambiguous, alternative approaches, estimations, interpretations; the problem-solving teaching technology is expedient, if students have got a certain starter level of needed knowledge, abilities and skills; considerable time wasting to achieve the planned results, and also weak controllability of students' cognitive activity (Hennessy, McCormick, 2013).

Simultaneously with the above-described pedagogical technology *the module teaching technology* develops. The essence of this technology contemplates either a student's independent realizing concrete aims or with insignificant help in the process of work at the module. The module is an instructional functional unit that focuses on a particular topic, it organically combines the educational contents and the technology of its

presentation (Stewart, Wilkerson, 1999).

As its advantages we can mention: the teaching aims studies are clearly correlated with the attained results of every student; development of the modules allows to make the educational material more compact and to introduce it in the form of blocks; the individual pace of educational-cognitive activity is set; the module (stage-by-stage) control of knowledge and practical abilities gives a certain guarantee to the teaching efficiency; certain "technicalization" of teaching is achieved; teaching depends on a teacher's mastery in a lesser degree.

Among its disadvantages we can distinguish: large labour intensiveness in constructing the modules; the module educational programme development requires high pedagogical and methodical qualification, special textbooks and students' books; the problem teaching level of modules is often impropriate, which does not assist to the development of students' creative potential, especially of highly gifted ones; in the conditions of module teaching the dialogue functions of teaching often remain practically unrealized; modernisation of the module requires considerable efforts (Baltazar, 1990).

The essence of *the concentrated teaching technology* lies in joining classes into blocks. During the day, week the reduction of the number of paralleled taught subjects takes place. Its main advantages are: shortening of professional training time periods; it provides better perception, deeper and stronger mastering of integral completed units of the educational material; forming students' understanding of the interdisciplinary connection; saving students' energy; integration of theory and practice; savings of organizational, financial and other resources; kaleidoscope perception of professional practice by students; a detailed description of the educational process algorithm**.**

However, despite a number of positive properties of this technology, it is worth to point out at its some disadvantages, namely: weakening of a systematic character of teaching other disciplines; a student loses an opportunity to refresh the earlier studied material; receiving a large volume of knowledge in a short time interval; realization of the account of students' psychological and physiological features; necessity to provide a permanent connection of this discipline study with the other disciplines; the technology requires strict algorithms of activity from a teacher and students; introduction of this technology requires complete reorganization of the educational process (Ropo, 1993).

Nowadays *the distance teaching technology* is enjoying a great popularity. It enables taking into consideration individual capabilities, necessities, temperament and employment

of students, that is why they can pass educational courses in any sequence and intensity. This technology also envisages the use of traditional forms of teaching (lectures, consultations, laboratory and control works, tests, examinations and others), but they have certain peculiarities. Application of the newest information technologies (the hypertext, multimedia, GIS, virtual reality, Skype) gives to the lectures of greater expressiveness. For their creation such elements of the cinematograph as direction, scenario and artistic education are used. Such lectures can be listened or look over wherever and whenever (Dudeney, 1998). However for successful teaching "at the distance" students must have strong motivation and self-organization, as the distance teaching technology is, foremost, oriented on self-education, ability to work independently.

It is also worth to mention such disadvantages: the absence of internal communication between a student and a teacher; the necessity of providing a number of individually-psychological conditions; the absence of practical classes and permanent control; the prevalence of the writing form of teaching; the absence of clear technological possibilities for students' authentication (Bates, 2005).

CONCLUSIONS

Having conducted all-round research of scientific works in traditional (illustratively-explanatory) and innovative technologies, we came to the conclusion, that each of them has strong and weak sides. We take the view that a pedagogical technology must be chosen in accordance with the teaching aim. Very often because of the lack of time the traditional teaching technology springs more rational, although using the problem-solving teaching technology educational material students get acquainted not only with knowledge, but also the way of solving the problem, and get involved in the process of searching the truth.

Considering the basic characteristics of available pedagogical technologies in the USA's educational practice and becoming familiar with the issue of forming the future agrarians' multicultural competence, we came to the conclusion, that this problem has not found a proper solution in the scientifically-methodical literature, and the available pedagogical technologies do not enable the forming of this personal quality, that is why as the main goal of our research work we to try to create a specific pedagogical technology of forming future agrarians' multicultural competence.

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