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Today's education must meet the requirements of environmental imperative, urgent problems of sustainable development of society and natural ecosystems. In Ukraine, the entire state system of environmental management is an acute need for qualified professionals, government officials, aware of the requirements of environmental and economic policy, terms of the concept of sustainable development. Now the problem of environmental education is gone beyond national borders and become international significance and character. The experience of Western countries in implementing ecological study precedes the national measure of 25–30 years ago, along with the transition to the principles of the Bologna process in higher education, national education system would have to take the positive elements of ecological disciplines, areas of training, instructors, teachers and the general public in these countries [Sayenko 2006a: 24].

1. Analysis of recent researches and publications

The path to sustainable development is through a gradual, consistent, universal environmentalizing society and economy that can be successfully carried out professionally trained and ecological conscious professionals with high ecological culture and noosphere thinking: officials, leaders of all branches of government, teachers training institutions. Prerequisite practical recognition of the ecological imperative and integration into the world and European community is the **implementation of** national environmental legal regulations to be consistent with international environmental standards.

The difference between environmental (ecological) education and education for sustainable development (EfSD) we see in deepening understanding not only of the current global environmental crisis, but crisis management [Sayenko 2006b: 360]. Therefore, the output of the current situation experts predict a change in the relationship of artificial systems created by man and Nature, in the reform of management system and development of theories of building a harmonious society in an efficient environmental monitoring and auditing in all spheres of human activity, to improve environmental policy at all levels.

The subject of education for sustainable development should be the conditions and methods of stabilizing socio-natural systems, their planning and sustainable management. But the foundation for the EfSD is ecological education, which provides an understanding of the processes occurring in natural and man-made systems and develops and helps implement effective environmental policy, ecological consciousness and culture. Eco-formed and graceful psychology will effectively make ecological of economic activity, reasonably decide inextricably linked to social and environmental problems [Sayenko 2007a: 149].

Despite the intensification of work in the formation of professional and environmental training university students question the professional competence of future specialists technical skills and psycho-pedagogical support remains little researched. Reorientation of modern psycho-pedagogy on personality, its development, revival of humanistic and ecological traditions is an important task of today's educational system. Teacher opinion emphasizes that professional competence is modified changes psycho-pedagogical competence and significant aspect of professional competence in general is its psychological and pedagogical competence.

2. The main material

In the modelling and characterization of the structure of ecological competence of university students is important to determine the ratio of two components – mental and pedagogical. In this paper, we proceeded from the fact that the mental component can be represented by: mental properties, mental states, mental processes, and pedagogical – conscious mechanisms of their development, manifestations of the activity. The combination of these two components is based on the awareness and consciousness, characterized by reflection of personality – professional understanding of their professional activities, social relations and of oneself.

Thus, psychological and pedagogical analysis of our model was implemented in two approaches: on the one hand – as a system ecological professional knowledge, and on the other – as a system of actions, processes, mechanisms that ensure their manifestation in the form of environmental competence. Observations were made both for students and for teachers. **Earlier we noted** [Sayenko 2007b: 144] that the synthesized element model of ecological training of future specialists is – „**a teacher** who should own theory of the subject and can not be limited to the role of information or controlling transmitter means, it must be organized, cognitive-competence, value-motivational, action-responsible, regulatory standard and ethical and cultural activities in order to create ecological thinking, consciousness, ethics, culture of the future specialist". That is, the knowledge of the teacher is also included in the developed model and characterized: **complexity, consistency, and effectiveness.**

In the system of teacher professional knowledge universities are the five main blocks – psychological, pedagogical, vocational guidance, specific objective and scientific research. Training in Psychology – is, above all, the idea of a specific psychic reality, „a heightened sense of spirituality" of other people, not just verbal and conceptual knowledge. Psychological knowledge provide control his own inner world, self-improvement on a scientific basis, which is necessary for each specialist as teacher and student. The effectiveness of professional functions largely depends on personal psychological readiness, which is an integral part of psychological knowledge.

Competence in a broad sense can be seen as creatively modified attribute personal level, a system of acquired knowledge, skills and abilities by which specialist flexibly using them, solves problems and challenges that arise in the process of life. Thus, the ecological model of competence is appropriate for both students and teachers as master of psychological and pedagogical knowledge and methods of their use: from conceptual apparatus to creatively productive work in different situations [Sayenko 2008: 178].

Psychological knowledge requires from teachers and students to understand other people, poverty standards, stereotypes, barriers are introduced in socium, for self-knowledge, self-overcoming, consumer attitude towards Nature, people, and oneself. The integration of psychological knowledge is necessary to other industries, including ecology, for understanding the interaction as mental phenomena with social, economic, and political factors. That is, through psycho-pedagogical aspect is the integration of subject and object of the model, the implementation of humanistic personal relations, confrontation negative phenomena of profession etc.

Pedagogical knowledge perform three important functions: ontological, indicative, evaluative, where the latter reveals valuable relationships society values of knowledge, actions, events, a system of ideals on which it is based, particularly the period of transition to the principles of sustainable development. Thus, feature professional pedagogical knowledge is their multilevel: methodological, theoretical and technological. Practice shows that scientific activity significantly increases interest in learning, broadens the mind, the ability to analyse and understand the achievements of modern science. The language of knowledge, as well as their types, levels, types, blocks can go at the time of manifestation – the tasks of professional activity.

Knowledge is the basis for the successful formation of these action-role-playing components of professional competence – skills. They are the result of training and independent practice. Through analysis of the ratio of the psyche and the researchers say that every activity has internal and external aspects that are linked inextricably. Any external action mediated processes occurring within the subject, and internal processes must appear outside.

The task of psychology is to study outside activities through the disclosure of internal aspect and real understanding of the role of mental activity.

It may be noted that competence is competence, not a set of knowledge, skills, abilities, etc., only in activities in the context of rules, functions, ie regulatory activity or professional culture. Nowadays, this kind of activity can only be ecological activities, not only normalized, as the impact on the environment, but also creative and defensive, aimed at reducing anthropogenic pressure on the Nature. But psycho-pedagogical competence is responsible for the manifestation of professional competence, advocates forming, systematic mechanism of professional competence; moreover, practice personality leads generated consciousness and different mental processes.

Conclusions

Given the crisis state of the environment implies, that professional competence without morality, responsibility, ecological culture not enough. Future specialists may have high professional knowledge and actively conduct destructive activity in Nature, which reached its climax in the XX century.

Thus, the knowledge, skills, beliefs even not enough to man, who takes an ecological position and become responsible for their actions. Looking for a great spiritual potential, which will send the acquired expertise in environmentally safe mainstream practical daily work.

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Abstract

The ways of modernization of ecological or environmental education in higher technical school during the competency paradigm and in final phase of the Decade of Education for Sustainable Development (2011–2014) were discussed.

Key words: ecological (environmental) education, psychological and pedagogical technology, education for sustainable development, ecological (environmental) education in technical universities.