

APPLICATION OF REMOTE EDUCATIONAL TECHNOLOGIES IN FORMATION OF EXPERT - ECOLOGIST COMPETENCE

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The problem providing ecological safety in Ukraine makes urgent necessity of qualitative improvement of ecological education. Effective ecological politics implementation is impossible without qualified experts capable to perceive quickly the new requirements of ecological management [1].

Among the main principles of ecological education process next can be allocated:

- systems concept of learning ecology- economic systems;
- continuity of education during the whole conscious life of a man;
- regular updating, renewing, improvement of ecological knowledge, abilities, skills and life's orientations of the man etc.

The continuity principle of ecological education process means, that it must start on a preschool level and proceed at all stages of formal education, and also to cover the post higher education, which purpose is the increasing of professional knowledge level, acquaintance with advanced achievements of ecology and nature protection.

In conditions of anthropogenic failures increasing special importance takes ecological education of the technical higher schools students and ecology experts of engineering level [2]. Lately, with intensive development of a science and information technologies, competence of the experts and members of administrative staff does not meet the increased requirements more often, therefore acceleration overcoming of difference between current and necessary levels of the competence became the main problem. Realizations of mentioned above is possible with the help of advanced technologies, particularly with the help of remote training system. It allows to provide virtual education, which, mainly, covers independent job with educational material in dialogue mode with computer.

To increase the efficiency and support of the remote and independent training its suggested to create intellectual educational web-system with high level of different processes automation in remote education. Such system includes the following features: adaptability, intellectuality and hypermedity. Adaptability - provides ability of system to adapt for current student requirements, correcting presentation of educational material, rate and style of training. Intellectuality - provides technologies of artificial intelligence application for improvement of different processes at Internet education. Adaptability of training systems, control of knowledge, process of creation of new training rates etc is necessary to relate to such processes. Hypermedity specifies the key form of existence of training rates, which are given to the trainee. All system and form of submission of educational materials constructs in view of maximal use of advantages, which gives hypertext (hypermedia) in comparison with the simple text.

Intellectual educational web based system should carry out the following tasks:

- creation and adjustment of educational process and training environment on the basis of modeling the purposes in educational inquiry that is maintenance of planning, management, estimation, coordination and realization of independent educational activity of the users;
- realization of the intellectual educational content conception for support works with educational and scientific heterogeneous electronic resources and maintenance of modern methods of their processing;
- maintenance adaptability and personalization of users activity in system.

The model of professional competence for any certain specialty can be conditionally divided at some levels: the first level matches to complete secondary education, second level - bachelor, third - expert, fourth - master. Each of the certain levels contains a set of educational materials (objects), which form hierarchical structure and can be unite to some competence.

Strictly formalized competence can belong and may be connected with one or several specialties. It depending on:

- as far as common they are;
- to what level of professional competence model they belong.

Let's present ours knowledge as educational hierarchically structured objects and split them on subjects. Each educational object has the weight, it allows to divide them on competence levels. When the best objects with greatest weight in the certain level has been learned, the level will be considered as closed. The specialty consists from several competencies, which are connected to tops of educational objects. Allocating separate competencies of one specialty, and comparing them with competence it is possible to see that some knowledge, skills of some specialties can cross.

The automatic formation of the dynamic training plan will allow to individualize the educational programs depending on a professional level of the expert - ecologist. It at some level solves one of modern training tasks - constant updating and refreshing of knowledge.

References

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