

10.2 Distance and correspondence learning of the subject “Descriptive geometry. Engineering and computer graphics” for students of the specialty "Automobile transport"

Research of distance learning as one of the options of electronic full-time or part-time learning, which adapts traditional forms of classes and paper learning tools in telecommunications. Distance learning is designed to solve specific problems related to the development of the creative component of education and its problems. The use of Internet technologies and distance learning of descriptive geometry opens new opportunities for continuous training of specialists and retraining of specialists, obtaining second education, makes training more accessible.

Key words: descriptive geometry, distance learning, Internet technologies, specialist, higher education, telecommunications.

Introduction.

Today, the Internet is firmly entrenched in our lives. Modern education is impossible without computers and the Internet. Most modern schoolchildren and students actively use the computer and the Internet in their lives and education. In modern society, with the rapid growth of information, a specialist needs to learn almost all his life. Previously, you could afford to learn once and for all. This stock of knowledge was enough for life.

Today, the idea of lifelong learning leads to the need to find new methods of knowledge transfer and learning technologies. Distance learning (LS) - a set of educational services (delivery of educational material, self-study, dialogue between teacher and student, control and verification of learning outcomes), provided through a specialized information educational environment based on the exchange of educational information at a distance computer network, mail, telephone, fax, etc.).

The purpose of the development of the transport service system is to provide comfortable living conditions for the population by becoming a stable functioning, cost-effective, attractive and accessible to all segments of the population system of urban passenger transport.

Transport services play an important role in the system of regional economic complex. Urban passenger transport, meeting the needs of the population in traffic, creates the conditions for the normal functioning of the city's economy and increases the free time of people, giving them the opportunity to use the services of territorially dispersed production and social structure of the regional economy. Urban passenger transport, saving public time, promotes the development of productive forces, expanding intra- and interregional ties, improving cultural and household services.

The level of development of urban passenger transport (MPT) is, according to most authors dealing with the effectiveness of its operation, both economic and social importance in their organic unity and interconnectedness. The economic consequences include the effect of reducing the loss of working time in the fields of material production and non-productive sphere by reducing work delays, increasing social productivity, improving product quality due to reduced transport fatigue, saving resources on social infrastructure development due to higher levels. its concentration. The social results of improving passenger services in the region include the expansion of opportunities for the use of cultural and educational institutions, increasing recreational opportunities for the population, improving human health and others. Thus, passenger transport creates the necessary prerequisites for the effective functioning of the economy as a whole and each region, serves the social progress of society, allowing to preserve and rationally use the socially useful lie of the inhabitants.

It should be noted that the system of urban passenger transport (MPT), from an organizational point of view is similar to life support systems: heat and electricity, water, etc. Any of these systems can not function properly without a fairly strict centralization of management. Factors that determine the degree of controllability are described by the ability to influence: the formation of the structure and number of rolling stock; formation of a route network; timetables; level of tariffs; setting quality standards, such as capacity utilization, traffic intervals, start and end of transport, etc. The degree of controllability of the MPT system is the first criterion.

From the point of view of the controllability of the MPT system, the possibilities of the city authorities were reduced. It turned out to be completely unmanageable: the

process of forming the structure of the bus fleet in terms of capacity, in terms of vintage composition. Weak control: this is the process of forming a route scheme, timetables. The most controlled parameter is the fare. The degree of controllability is related to the ratio of the share of traffic accounted for by municipal and commercial transport. However, due to the current legislation, the presence of commercial carriers on the market of urban passenger transport makes it impossible to create a properly managed MPT system.

The main task of the MPT in the country - to ensure the delivery of the population to places of employment, training and only then provide household and cultural trips. There is a fairly close relationship between the cost of travel and the geography of employment at the current market price of labor. For example, in cities, each increase in the cost of travel has led to significant losses in the organizations of the lowest paid categories of the population: workers, junior medical staff, cleaners, etc., and this with limited opportunities to find a new job. Note - in the EU, the cost of the family budget for public transport is about 5-8%. In Ukraine, up to 25% of the family budget for low-income families. Availability of public transport is the second criterion, including price, territorial and technological.

Among the current trends of development is a promising area of improving vocational education is the introduction of new pedagogical technologies and principles of educational process, implementation of new models and content of continuing education, including distance learning (DN), based on widespread use of modern information and communication technologies (ICT).

The development of new information technologies entails the emergence of a fundamentally new educational system that can provide educational services to millions of people while reducing the specific cost of education. It is to achieve these goals aimed at the Internet - education, which can be defined as the education of the general population, obtained through informational educational resources of the Internet. Internet - educational resources - are materialized in a computer network:

- information products of the work of specialists dealing with education;

- computer training programs, including electronic textbooks, simulators, laboratory workshops, test systems;
- training systems based on multimedia technologies, built using personal computers, video equipment, optical drives;
- distributed databases by fields of knowledge.

Distance learning is characterized by all the components of the learning system inherent in the learning process: meaning, purpose, content, organizational forms, learning tools, system of control and evaluation of results. ICT tools (information and communication technologies) for distance learning:

- distance learning courses;
- Email ;
- forum and blogs;
- chat and ICQ;
- TV and video conferencing;
- wikis, etc.

Distance learning according to its methodology claims a separate form of education (along with full-time, part-time, evening, external). Distance learning is playing an increasing role in the modernization of education, which is carried out with the help of computer telecommunications and has the following forms of classes: chat - classes - training sessions carried out using chat technology. Chat - classes are held synchronously, ie all participants have simultaneous access to the chat. Within the framework of many distance educational institutions there is a chat school, in which the activities of distance teachers and students are organized with the help of chat rooms. Web classes - distance lessons, conferences, seminars, business games, laboratory work, workshops and other forms of training sessions conducted with the help of telecommunications and other features of the "World Wide Web". For web-lessons we use specialized educational web-forums - a form of work of users on a certain topic or problem with the help of records that remain on one of the sites with the appropriate program installed on it. Web forums differ from chat classes by the possibility of longer (multi-day) work and the asynchronous nature of interaction

between students and teachers. Teleconferences are usually based on e-mail mailing lists. Distance learning uses various computer technologies - E-Learning / online Learning, Internet conferencing, Internet broadcasting. E - learning - e-learning system, synonymous with terms such as e-learning, distance learning, computer-based learning, network learning, virtual learning, learning with the help of information and electronic technologies. Online learning is becoming more popular every year. This is due to its advantages:

- low cost - the user pays only for the knowledge he receives: the user does not have to pay for travel, accommodation and other costs associated with studying in another city;

- Convenience - the user gets a unique opportunity to study on their own schedule, in accordance with their personal and professional needs. A person can study while at work, at home or traveling;

- choosing your own pace of learning - students can choose their own pace of learning the material, which will correspond to its nature, desires and capabilities.

Internet conference is an opportunity for one person to communicate directly with the target Internet audience through communication programs on the Internet. Web conferencing is an electronic projection of regular conferences. The only difference is the breadth of the audience, venue and technical limitations. Types of Internet conferencing:

- Skype conferences;
- Friendfeed conferences / seminars;
- Wiki-conferences / seminars;

- Integrated when using different environments and services (eg wiki and blogs, wiki and skype). Internet - broadcast - broadcast of various events (presentations, conferences, exhibitions, training courses, concerts, football matches, etc.) via the Internet online and more.

Becoming more and more popular and necessary means of information support, the Internet - broadcasts allow to reach the widest audience, without demanding at the same time considerable expenses. Due to the spread of broadband Internet, tens of millions

of users of the World Wide Web use video as the most effective, reliable and convenient form of information.

Development prospects.

With the development of Internet technologies, distance learning will improve. Distance learning will become widespread in Ukraine when appropriate technical capabilities and good telecommunications channels appear. Further development of distance learning systems involves ensuring maximum interactivity. In fact, it is no secret that learning only becomes complete when the imitation of real communication with the teacher is achieved - that's what you should strive for. It is necessary to use a combination of different types of electronic communications, which allows to compensate for the lack of personal contact through virtual communication.

Many large companies are creating distance learning centers in the structure to standardize, reduce the cost and improve the quality of training of their staff. Virtually no modern company can live without it. Or, for example, Microsoft has created a large training portal to train its employees, users or buyers of its products, software developers. However, some courses are provided free of charge or bundled software.

Distance learning is an electronic version of full-time or part-time learning that adapts traditional forms of teaching and paper teaching aids to telecommunications. Distance learning is designed to solve specific problems related to the development of the creative component of education and problems that are difficult to solve in ordinary learning, in particular:

- strengthening the active role of the student in their own education: in setting educational goals, choosing dominant areas, forms and rates of learning in various educational fields;
- a sharp increase in the volume of available educational arrays, cultural and historical achievements of mankind, access to world cultural and scientific treasures for children from any locality where there is telecommunications;
- getting the opportunity to communicate with professional teachers, like-minded peers, consulting with high-level professionals, regardless of their location;

- increasing the heuristic component of the educational process through the use of interactive forms of classes, multimedia training programs;
- more comfortable, compared to traditional, conditions for creative self-expression of the student, the opportunity to demonstrate the products of their creative activities for all, a wide range of expert opportunities to assess creative achievements;
- the opportunity to compete with a large number of peers in different cities and countries, through participation in distance learning projects, competitions, Olympiads.

Conclusion

Distance learning technologies allow for distance learning, not only without losing the quality of learning, but on the contrary improving it through individualization, active learning methods, two-way interaction between teacher and student. In addition, the advantages of distance learning include such features as flexibility, modularity, manufacturability, updating the role of the teacher, increasing motivation and self-organization of students. Learning becomes interactive, the importance of independent work of students increases, the intensity of the educational process increases. The use of Internet technologies and distance learning opens new opportunities for continuous training of specialists and retraining of specialists, obtaining second education, makes training more accessible. At the same time, the need for lifelong learning or retraining develops the potential of distance learning.