# Training of teachers for teaching in the conditions of distance education

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**Abstract.** An effective distance learning form should use detailed and particularly careful planning of the educational process. The organization of distance learning should have clear objectives and goals regarding the conditions of the educational process. Communication and interactive technologies, effective feedback between the student and the teacher are of great importance in distance education. The use of a modular system in distance education makes it possible to improve its quality control. The success of distance education depends on the level of motivation of students in acquiring new knowledge and skills. To improve the effectiveness of quality control in distance education, the level of training of teachers and their ability to motivate students to educational activities is important. A modern teacher should be able to use modern information and pedagogical technologies and constantly improve the level of his professional competence.

### 1 Introduction

The socio-economic development of modern society is primarily based on the use of information technologies, previously widely used material production is fading into the background, and the production and processing of information is coming to the fore. This means that the main criterion for the economic power of a modern state is human capital. It is the knowledge, skills and abilities of the population, first of all, that determine the opportunities for technological and economic development of the state.

At the same time, the knowledge and skills acquired within the walls of a higher educational institution quickly become obsolete and do not allow for an effective professional career throughout life. A modern specialist needs to constantly improve the level of his professional qualifications.

In the era of post-industrial development of society, according to [1], the development

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of technologies around the world contribute to the formation of a single global educational space.

This is facilitated by distance education, which is becoming widespread all over the world.

According to [2], the main purpose of distance education is to provide conditions for professional training and retraining of a wide range of specialists, regardless of their place of work and residence.

According to [3], distance education should be implemented using individual curricula. This will allow students to master the training material more effectively. The basis of the educational process in distance education is systematic intensive and controlled independent educational activity of students, carried out by them at a convenient pace, place, and in some cases also at a convenient time.

According to [4], due to the insignificant direct contact between the teacher and the student when using distance education, it is important to exercise effective control over the course of the educational process and the results of the assimilation of educational material by students. In distance education, the use of multi-criteria and objective methods of controlling the quality of knowledge among students plays an important role. Of particular importance is the importance of identifying the student's identity in order to prevent the possibility of falsification of learning outcomes.

According to [5] in distance education, it is advisable to use the following methods of assessing the knowledge and skills of trainees (Fig. 1):

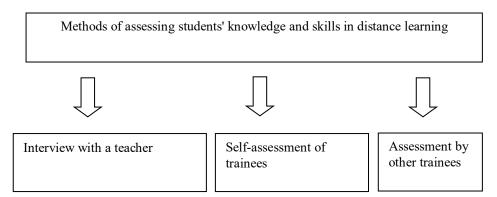


Fig. 1. Methods of assessing students' knowledge and skills in distance learning.

According to [6], the effectiveness of the implementation of distance education depends on the impact of the following factors:

- 1) Pedagogical technologies used in the educational process.
- 2) The presence of effective feedback between students and the teacher
- 3) Availability of educational and methodological materials developed for distance learning.
  - 4) Availability of effective methods of delivery of educational materials to students.

According to [7], the basic principles of distance education can be distinguished (Figure 2):

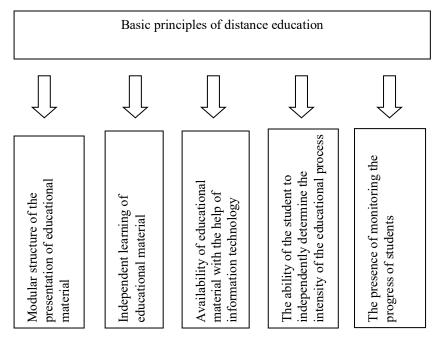


Fig. 2. Basic principles of distance education.

According to [8] distance learning has the following advantages:

- 1) The opportunity to undergo training and retraining at the workplace
- 2) Operational availability of teaching materials
- 3) The ability to communicate with a teacher who is at a great distance from the trainees
- 4) The ability to carry out training taking into account personal time schedule
- 5) The possibility of on-line quality control of students' knowledge.
- 6) Low cost of distance learning compared to other types of training.
- 7) The opportunity to study in comfortable conditions for the trainees
- 8) The use of interactive technologies in distance learning increases the motivation of trainees.

According to [9] the distance learning form has the following disadvantages:

- 1) The need for a computer and Internet access for training
- 2) Lack of direct direct contact between the teacher and the student
- 3) Distance education is ineffective for teaching practical skills, for example, to doctors.
- 4) The need for specialized training of teachers for distance learning.
- 5) Difficulties with the implementation of objective control of the level of knowledge of trainees.

According to [10] in distance education, similarly as in the traditional form of education, a teacher needs deep knowledge of the academic discipline taught by him, as well as an understanding of the logical and structural connections of the taught academic discipline with related training courses.

According to [11], in distance learning, a teacher should be able to apply modern scientific and technical information in the educational process, as well as possess innovative methods of teaching educational material. Distance learning requires a teacher to have competencies in the field of communication and information technologies to the extent necessary for the organization of the educational process.

According to [12] in distance learning, a teacher should have the skills of interactive interaction with students, be able to create teaching aids adapted for this form of training. He must have the skills to control the knowledge of students studying remotely.

According to [13], a teacher in distance learning should know the psychological and pedagogical features of distance education, be able to properly organize the educational process and educational activities of trainees, be able to assist students in designing their educational trajectories, have the skills to increase the motivation of trainees to independently acquire knowledge.

## 2 Methods

During the execution of this scientific research, the authors used an analytical method, which provided an opportunity to consider the studied problems in their unity and development.

Taking into account the goals and objectives of this study, we used a functional-structural method of scientific cognition.

As a result of the implemented research, we have studied a number of problems related to the training of teachers for teaching in the conditions of distance education.

#### 3 Results

As part of this study, we have developed a professional development program at the Dnipro City Institute of Teacher Training.

The program we proposed included technical and psychological-pedagogical training. As part of the technical training, students of the program studied new information technologies and gained skills in using multimedia and computer technology in the educational process.

Within the framework of psychological and pedagogical training, students of the program studied pedagogical technologies used in distance education, psychological features of communication in virtual space, improved skills in the theory of education and the theory of learning.

Within the framework of the program, trainees acquired skills in using developing and active forms of learning such as: round table, business games, brainstorming, project method, case method, problem and content learning, cognitive maps, dialogic teaching methods, simulation and interactive games.

The program participants studied the methodology of organizing Web classes, teleconferences and chat classes.

To determine the degree of readiness of teachers for distance learning, we have developed a methodology for determining their readiness to perform their professional duties in the conditions of distance learning.

#### 4 Discussion

The distance form of education should provide for more detailed and thorough planning of the educational process. Its organization should have a clear formulation of the goals and objectives of the educational process, as well as effective methods of delivering the required educational materials.

The basis of distance education should be interactive educational technologies, group training and effective feedback between the teacher and the trainees.

Of great importance in distance education is the motivation of trainees to acquire new knowledge, teachers using distance learning should have the skills to increase the motivation of trainees.

To improve knowledge quality control, the distance learning structure should be

modular.

In distance education, it is advisable to have a correlation of distance pedagogical technologies and methods of developing learning.

## **5 Conclusions**

For the effective functioning of distance education, a certain level of teacher training is required.

The learning process in the distance learning form is characterized by the extensive use of information and communication technologies.

A modern teacher should possess modern information and educational technologies and constantly strive to increase the level of his competence in this direction.

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