

## Features of Joint Activity of Students and Teachers in Distance Learning System

**Gennady Vasilyevich Glukhov**

Samara State University of Economics  
Samara, Russian Federation

**Tatiana Vladimirovna Gromova**

Samara State University of Economics  
Samara, Russian Federation

### Abstract

Extensive use of distance education which is equivalent to traditional forms of education, implementing information and communication technologies are recognized as one of the priority tasks of education. Distance education in different forms contributes to the creation of a unified educational space, ensuring the possibility of obtaining standardized education to any person at any point in the educational space, regardless of his/her location, social and material status, physical condition, etc. Of great importance in the development and implementation of distance learning (DL) in educational institutions of various levels is the availability of teachers able and willing to carry out activities in the DL system. Characteristics, models and features of joint activities of teachers and students in the DL system, models of distance education as well as means and forms of DL are the subject of study in this article. The obtained results can be used in the preparation or professional development of DL teachers to work in educational establishments of various profiles.

**KeyWords:** distance learning, distance learning teacher, distance education, models of distance learning.

### INTRODUCTION

It should be noted that the problems of distance learning in the context of the development of the world educational space in recent years developed quite actively [1-5]. In solving these problems the availability of teachers, prepared professionally and psychologically to work in DL, as well as a system of training/retraining of such teachers is essential. In this regard, the study of features of joint activity of students and teachers in distance learning is of particular importance. In the literature devoted to DL one can find such a notion as "a model of distance education" [6-8]. Knowledge of DL models is important, especially when setting up the DL system of a University, as each model has its own characteristics, implementation conditions; and the specifics of the University, its material and technical base and its students determine the choice of a particular model, the analysis of which follows below.

### RESEARCH METHODS

Problems related to training/ retraining/ professional development of DL teachers are complex and multifaceted and involve many tasks. In particular: justification of the concept of designing the training of teachers; identification of specific areas of activity of the DL teacher and the development of his multidimensional model of personality and professional

competence; the design of the content of teachers' preparation to work in the DL system (DLS) and creation of scientific-methodical support of implementation of the content in the format of guidelines and training manuals, programs and guidelines; development and testing of technology for the training of teachers for work in the DLS; the working out of criteria and indicators of the teacher's readiness for the DL activities, testing the effectiveness of the authors' technology. To solve the problems in the study the following methods were used: theoretical - study of the scientific-pedagogical, psychological and methodical literature on the problem of training teachers, as well as domestic and foreign pedagogical experience; modeling, design and analysis; empirical - observation, testing and questioning of participants of the educational process; diagnostic and formative experiment, statistical processing of the results. These and other aspects are covered in the work [9].

In this very article the task will be focused on the analysis of characteristics, patterns and features of joint activities of teachers and students in the DL, models of DL and the peculiarities of the means and forms of DL.

## RESULTS

### **General characteristics of joint activity of students and teachers in distance learning system**

#### ***Models of distance education.***

As noted earlier the knowledge of the DL models is very important, especially when creating a DL system at a particular institution, as each model has its own characteristics, implementation conditions, and the specifics of the University, its material and technical base, enrollment, etc. determine the choice of a particular model.

The bases of the classifications of DL models are different. So, E. S. Polat considers that the current practice of distance education is based on the six models using a variety of traditional and new information technologies (NIT) [10]:

1. The training is focused on students, who for various reasons are unable to attend educational institutions.
2. Training at one University where the students study remotely on the basis of NIT.
3. Training on the basis of several educational institutions.
4. Training in specialized educational institutions (e.g. the British Open University).
5. Self-learning system. The training is conducted with the use of TV and/or radio, using the CD - ROM, teaching materials on paper.
6. Informal learning for self-education on the basis of the multimedia programs.

- A. V. Gustyr has a different approach to the classification of models. He believes that there are two different basic models of distance education, formed on the basis of two types modern DL - correspondent (part-time) learning and classroom learning using information and computer technology (ICT) [7].

### **The model of mutual activities of students and teachers in the DL system.**

#### ***General characteristics of the model are interrelated activities of students and teachers in the DL system.***

Following the system approach, let's focus on the characteristics and peculiarities of activities of teachers and students in the DL system.

Joint activities of students and teachers in the DL system involve the processes of learning and teaching will demonstrate in a model that includes five basic stages:

1. The acquaintance, communication, motivation
2. Information exchange
3. Understanding
4. Application
5. Construction of knowledge and development.

First give a General characterization of the model. A prerequisite for effective activities of students in the DL system is the motivation of students, the decision to get an education (to improve skills) through the distance learning system (the first step). This stage involves the introduction of the teacher and students. From that moment starts the support of students by DL teacher: identifying their needs, difficulties, level of knowledge. At the second stage students learn information provided by the teacher or they themselves look for material related to the course content.

Pedagogical support at this stage is through counseling (when searching for information, selecting sources, etc.). The third and fourth steps involve assimilation of received information, group discussion and cooperation, support of which takes place in the course of practical work, consultations, tracking the dynamics of students' development. The fifth stage is the generalization of acquired knowledge and skills.

At each stage, students need certain skills. Each stage requires certain skills of the DL teacher. When organizing practical training with future DL teachers one should be aware that at the first stage they interact usually with only a few students. After the second stage the number of students with whom they collaborate and the frequency of interactions are gradually increasing, while the fifth step involves a large share of independent work of future DL teachers.

### **Five stages of joint activities of students and teachers in the DL system**

The activities of students and teachers in the DL system can be presented through the 5 stages that characterize the interaction of these two subjects of the educational process. Let's discuss the characteristics of each stage in more detail.

#### **First stage: acquaintance, communication and motivation**

Throughout the training, and especially at the beginning when the student may be faced with unfamiliar systems and ways of working, it is important to acknowledge the support of the DL teacher. At the first stage motivation, the success of learning depends greatly on vision of the student perspectives of learning, objectives and possible difficulties. The task of the teacher is to help students to learn and to offer assistance (via phone, e-mail). At this stage the teacher facilitates the group cohesion, on his initiative there can be organized self-help groups.

The teacher should give the most information about the course, time, schedule of face-to-face meetings (if these are meant) and sending control tasks. It is also necessary to clarify the role of the home and the final tasks in the course of the study and the requirements to them. In other words, the teacher must "remove" the likely questions of the students, which can lead to difficulties in learning.

It is obvious that this stage will be in full-time mode, the so-called orientation session. The first stage ends when the students are comfortable in the group and starts to send the first message to each other and the teacher.

### **The second stage: information exchange**

At this stage students get used to a new learning environment, there emerges a society of people working on common tasks. When students learn at this stage they get acquainted with the etiquette of communication and technology, they are ready to accept and search for information. Speaking of communication at this stage it is worth noting that the teacher needs to make every effort to make students have the desire to communicate. Group discussions often reveal the level of understanding of participants in how quickly and efficiently the group works. At this stage the teacher is to encourage the development of mutual respect among students, to eliminate imminent conflicts, to help students engage in better communication.

One of the requirements for methodological support of DL states that the course (multimedia, textbook) should be self-sufficient from the point of view of availability of information. Often the course content is available to students in the form of well-designed and prepared print materials, videotapes, CD-ROMs, in text format on the Internet. Students independently study theoretical materials, in consultation if necessary with the teacher. The teacher, in turn, should stimulate the students' search for additional information to specify the necessary references and sources. The skills of independent information search, selection of the necessary content of students at this stage can be developed not enough, so the teacher should guide the information search of students. By the beginning of this stage the DL teacher should consider the techniques and working methods - discussions, participation in computer conferences, etc.

### **The third stage: understanding**

At this stage there occurs the reproduction of the learned knowledge by trainees. Students apply their knowledge for solution of typical educational tasks, they begin to interact more among themselves. To achieve this objective tutorials are effective where under the guidance of a DL teacher can be used different active teaching methods that can be used to eliminate the knowledge gaps.

At this stage the competent management by the teacher of students' cognitive activity is important. The technique of involving students as "experts" may be justified here - different people have different experiences, knowledge from different fields and this experience, vision and ideas can contribute to a better assimilation of theoretical knowledge, solving problems, etc. The teacher should focus students on the analysis of the activity (What parts were the most difficult and why? What skills are missing?).

### **The fourth stage: application of acquired knowledge**

At this stage, students perform tasks related to the application of acquired knowledge to solve non-standard tasks. They formulate their understanding of the subject. What they are learning is not so much the result (information) as cognitive creative process that involves the exchange of opinions, the evaluation, and the opportunity to correct them during the discussion or work in pairs. Training at this stage is not only active but also interactive.

The teacher - adviser plays an important organizational and managerial role. He organizes groups and supports their activities, controls the discussion - for example, summarizes the statements of students and relates them to the concepts of the theoretical material; stimulates the exchange of opinions, directs the discussion in the right direction, raises new challenges and offers alternative approaches to their solution. Work in pairs and groups allow solving

tasks, considering different points of view, coming to a consensus, etc. A student is involved in the discussion with other students and experts in the process of communication.

The teacher can perform on a par with the students; offer his/her solutions to the tasks. Much depends on his/her behavior - an authoritarian style, participation on an equal basis, relying on one's own experience and so forth. At this stage a range of active learning methods can be used: role play, business games, game design (it is based on a combination of individual and joint work of students), case studies. An important role at this stage also plays a reflection activity.

### **The fifth stage: construction of knowledge and development**

At this stage there is a kind of generalization of acquired students' knowledge and skills. They are given the opportunity to develop their own approaches and to apply them in their activities. Construction of knowledge occurs when students investigate a problem, come to a definite opinion, discuss it with others and assess their positions, i.e. participate in reflection.

It is possible that students will need less support and help from the teacher-adviser. In this period the teacher does not provide ready answers; students become more authors but not just carriers of information. At this stage the ability to think critically, to evaluate the results of independent activity are being formed. Students and teachers can use the so-called constructivist approach which encourages students to think independently and to explore the process of knowledge accumulation [11, 12]. The 5th stage is mainly reflection: evaluation of process and results of training and its effectiveness, the impact of technology on the learning process. The teachers in turn must be willing to offer the students exercises and assignments, developing critical thinking (e.g., written comment of each other's works; presentation of their final projects, topics, which are specified in the previous stages). At this stage it is appropriate to conduct business games as the most difficult, synthetic form of active learning.

On the 4th and 5th stages there is no training in lecture form. DL gives students the chance of self-search and analysis of information instead of proposed by teacher ready knowledge. The students themselves construct knowledge through working in pairs and groups under the guidance of the teacher. The teacher here must have the ability to respond quickly to the game or discussion, summarize, evaluate and come to the assessment activities together with the students, in other words - the ability to manage the cognitive activity of students. Through the whole process of learning there should be continuous communication among students and with the teacher.

If in the process of studying students get sufficient support from the teacher, the transition from stage to stage and achieving higher levels will be fast and efficient.

In the description of this model we used the terminology of the learning process with the notions "student", "teacher". However, this model can be taken as a basis in the preparation of DL teachers, which in this case are in the role of trainees.

### **Features of means and forms of distance learning**

Methods and forms of organization of educational-cognitive activity of students are important components of the DL system. The analysis of numerous sources, including [13-16], as well as the generalization of the results of the investigations showed that the DL means of education can be classified as follows:

- books on paper;
- training materials on CD-ROM;

- electronic educational publications;
- audio training and information materials;
- video training and information materials;
- devices with remote access;
- database of information and knowledge with remote access.

The most common means are: books on paper, e-mail, video conferencing, CD, Internet, etc. One of the problems in DL is the control the students' activities. Despite the fact that, as noted above, the backbone of the learning process in DL is intensive independent work of the student (which in our opinion implies a rather high motivation to studying, the desire to acquire knowledge and subsequently to apply them in practice), the value of the controlling component can hardly be overestimated. When carrying out various tests and examinations in the conditions where teachers and students cannot see each other, there may be situations of dishonest attitude of students towards their work. To avoid such situations especially important control points should be conducted face to face or by video - conferences.

### **DISCUSSION**

It should be noted that the problems of distance learning in the context of the development of the world educational space in the conditions of new educational paradigm in recent years have been developed quite actively. Main trends of education development concerning informatization are considered in the works of [2, 3, 4, and 18]. The issues of state and prospects of development of DL in the system of continuous education in Russia, its theoretical support raise in their works [19 - 22]. Issues of organization of continuous education, technical and didactic support of DL in the sphere of higher education are dedicated the work of such researchers as [1, 23 - 25]. Questions of psycho-pedagogical aspects of DL are analyzed in the works of [26 - 30].

However, despite the theoretical and practical significance of these studies, their importance in the task of improving the quality of education through the use of information and communication technologies it should be noted that until now, the design and implementation of scientifically based pedagogical system of training of University teachers to work in DL system remains one of the unexplored problems of theory and methodology of professional education.

### **CONCLUSION**

In conclusion, it should be noted that as a result of the work done and the generalization of the obtained data there was presented characteristic of joint activities of students and teachers in the DL system, as well as models of DL and the main stages of joint activities of students and teachers in the DL system as well as means and forms of DL.

The continuation of further studies of this problem lies in developing a model of personal and professional competence of the DL teacher aimed at the creation of professionally significant qualities of the DL teacher and the development of technology for DL teachers' training.

### **RECOMMENDATIONS**

The material presented in the article can be valuable for DL teachers (current and future), professionals working in continuing education, researchers of problems of theory and methodology of professional education.

## References

- Andreev, A. A. (2002). Applied philosophy of open education: pedagogical aspect/ A. A. Andreev, V. I. Soldatkin. - Moscow: "Alpha". - 168 p.
- Voronina, T. P., Kashitsin, V. P., Molchanov, O. P. (1995). Education in the era of new information technologies. - Moscow: Science. 220 p.
- Kinelev, V. G. (1996). The development trend of higher education on the threshold of the XXI century. Moscow: Bulletin of the ARV. - 167 p.
- Solovov, A.V. (2006). E-learning: issues, teaching, technology. Samara: a New technique. – 464 p.
- Alvarez, I., Guasch, T., Espasa, A. (2009). University teacher roles and competencies in online learning environments: A theoretical analysis of teaching and learning practices. European Journal of Teacher Education, 32(3), 321-336.
- Borisova, N. V., Kuzov, V. B. (2000). What will the teacher be in the era of virtual education? (Model of a teacher - tutor). - Moscow, 2000. P. 107- 114.
- Gustyr, A. V. (2001). To the definition of the terminological standard of open and distance education. Problems of legal support of open education. Moscow: MISI, 2001. P. 45-51.
- Virgil, E., Varvel, J. (2007). Master online teacher competencies. Online Journal of Distance Learning Administration, 10(1), 1-41.
- Gromova, T. (2011). Theory and technology of preparation of teachers to work in distance learning (Doctoral dissertation). Tolyatti State University, Tolyatti, Samarskaya region, RF. - 383 p.
- Polat, E. S. (2001). New pedagogical and information technologies in the education system. - Moscow : Academy. - 270 p.
- Alyushina, J. B., Dmitriyevskaya, N. (2000). Our vision of a specialist model. Scientific support of open education- : Moscow: Publishing house of the University. - P. 27-34.
- Glukhov, G., Gromova, T. (2016). Functional Components and Roles of the University Teacher in Distance Education. International Review of Management and Marketing, 2016, 6(S5) 235-242. Available at <http://www.econjournals.com>. No. 5. P. 93-98.
- Izotov, M. I. (1998). The organization of educational process and training material for distance education: conceptual approaches. Moscow: RCCEP. - 31 p.
- Nazarova, T. S., Polat, E. S. (1998). Learning tools: technology of creation and use. – Moscow: URAO Publishing house. - 204 p.
- Darby, J. (2001). How to Make a Good Online Course. - Oxford. TALL. – 138 p.
- Balogh, Z. & Turčáni, M. (2010). Creation of education activities models with e-learning support. Information & Communication Technology in Natural Science Education. Vol. 21, No. 4, 30-38.
- Lewis, P. A. et al., (2016). Flexible learning: Evaluation of an international distance education program designed to build the learning and teaching capacity of nurse academics in a developing country. Original Research Article Nurse Education in Practice, Vol. 21, 59-65.
- Tiffin, John. (1992). What is virtual training. Education in the information society. - Moscow: Informatics and education. -312 p.
- Evdokimov, M. A. (2005). Distance education as a phenomenon of economic, social, technological conditions of the era/ Samara: Samara State Technical University. - 144 p.
- Liyanagunawardena, T.R., Adams, A.A., Rassool, N., Williams, S.A. (2014). Blended learning in distance education: Sri Lankan perspective. Commun Technol, 10(1), 55-69.
- Tuninga, R. (1995). The Supply and Demand of Distance Education in Russia. - The World Bank, Bureau Cross. - 110 p.
- Zaitseva, Zh. (2002). Open education - the strategy of XXI century. Moscow : MISI. - 356 p.

Chernilevskiy, D. V. (2002). Didactic technology in higher education. - Moscow : Yuniti. - 208 p.

Khursheed, B. (2001). Students and Tutors. - Oxford: TALL. - 218 p.

Manton, M. (2001). Techniques for tutors. - Oxford. TALL. - 152 p.

Demkin, V., Rudenko, T., Serkova, N. (2000). Psychological and pedagogical features of distance learning. Higher education in Russia. № 3, 124-128.

Hernández-García, Á., González-González, I., Jiménez-Zarco, A. et. al. (2015). Applying social learning analytics to message boards in online distance learning: A case study. Original Research Article. Computers in Human Behavior, Volume 47, June 2015, 68-80.

Mogilev, A. V. (2000). The concept of development of distance education in a regional University. - Moscow: RCPQST. - 32 p.

Pholboon, M. et al., (2015). Development of Continuing Motivation via Distance Learning Model in Unrest Southernmost Provinces, Thailand. Original Research Article. Procedia - Social and Behavioral Sciences, 174, 2616-2621.

Skibitskiy E. G. (1999). Psycho-pedagogical aspects of distance learning. – Novosibirsk.138 p.