Higher professional psychological education on the basis of distance learning technologies: experience, problems, perspectives

Bronyus Bronevich Aysmontas

This article analyzes an experience of development and application of distance learning technologies in the field of higher professional education. A special attention is paid to the development of academic, tutorial and methodological materials for e-learning: academic and methodological electronic complexes, video-taped lectures, tests for on- and offline exams, etc. The article describes specific features of the given materials, analyzes their structure and shares some of the experience, concerning their development. The quality of distance learning is treated as depending on a variety of factors, including specially arranged interactions between a dean and students, between staff members of the dean's office and students, among students and their classmates. These interactions are practiced in the form of Internet-conferences, webinars, and other forms of interaction between the subjects of a learning process. In addition, the article considers the matter of influence of distance learning on the development of students' personality, namely such features as self-dependence and activity.

1. Introduction Distance learning of psychology: pro et contra

Today, new approaches and technologies of education grow rapidly throughout the world. Elaboration and application of Internet-technologies change considerably all the aspects of our life, including education. Modern education is definitely inconceivable without information and communication technologies (ICT). The given technologies require a different approach to arrangement of the education process, present various methods of presentation of information, lead to a completely different level of arrangement of students' independent learning and require the revision of a teachers' role. Distance learning, different variants of open education are an excellent example of ICT application in education (Krasnova/ Belyaev/ Solovyev 2002, Shennikov/ Teslinov/ Tchernyavskaya 2006, Polat/ Bukharkina 2007). In recent years, they have been actively applied in learning of psychology as well. As Michael G. Moore points out, "the time for transition to the distance learning is a truly historical moment". Before now distance learning was not considered so important for social and economic growth. Over recent years the situation has changed a lot due to a constantly growing teachers' interest to the application of information technologies, i.e. ICT, which provided new perspectives for interpersonal communication (Moore/ Macintosh/ Black 2006).

The term "distance learning" is often used as a synonym for "distance education", but is not identical to it. Distance education is a system and a process that provides curriculum resources for students. Distance learning can take many different forms and is typically characterized by the following: 1) separation by space and/or time of a student and a teacher, students and training materials, 2) communication among a student and a teacher, among students and their classmates, access to learning content is provided through one or more technologies (and not necessarily through electronic ones).

In Moscow State University of Psychology and Education distance learning has been put into life over the previous 10 years. Now we can conclude that within this period a new non-borrowed model of higher professional education for psychologists has been created. Many people may ask the question: Can one remotely teach psychology? If you understand remote learning in a simplified form, only as a "distance learning", similar to the extramural traditional education, the answer is unequivocal: it is impossible. Why?

Traditional and distance learning have their advantages and disadvantages. Traditional pedagogy is considered to be based on technologies and methods of coercion. Unfortunately, the traditional approach to learning does not attach a special value to an independent work of students. A teacher (not a student) is usually the main figure in the learning process. Teachers often reproduce the out of date information from their own regularly reprinted tutorials or reduce the number of issues for discussion to the ones they know better or prefer more. In this case, the student is not an ordering side in his/her own education, and teaching methods are out of line with the advanced information technologies. These are just some of the common characteristics of our traditional training. Today, a variety of modern informational and communicative technologies alongside with Internet technologies has penetrated into all spheres of our lives. The nature of the educational process has changed a lot under the pressure of these technologies. The wellknown Soviet slogan "education for the rest of your life" is now regarded as a throwback to the general progress. Every educated and intelligent person today understands that getting "education for the rest of his/ her life" in a modern, rapidly changing information-related situation is unreal. So many people from general populace and businesses make a decision on qualification upgrading or getting the second higher education, including a psychological one. They cannot spend several hours per day for learning, which is necessary within traditional and often inefficient technology. They prefer to combine work and study at the University. This requires new approaches, new technologies, and new pedagogy, namely, andragogy. This is mainly what defines the degree of such rapid development of distance technologies both abroad and in Russia within recent decades. In the traditional sense, these technologies are associated with lack of contact with a teacher. It is quite possible in case of the advanced training, yet, it is not possible on the level of higher professional education. It is impossible to train specialists without their communication with a teacher. However, remote sensing technologies provide entirely different level of organization and management of an independent activity of the trainee. In our opinion, the best results can be obtained with the help of an optimal combination of the advantages of traditional learning and distance technologies, as the shortcomings of one system are compensated by the advantages of a different approach. This approach provided the basis for development of a model of distance learning of psychology at the faculty of distance learning in Moscow State University of Psychology and Education (MSUPE).

Specific features of a distance model of psychology learning in MSUPE as follows:

- Large volume of independent work.
- High self-organization and responsibility, ability to plan one's work.
- Purposefulness and inner motivation for a success.
- Readiness to change the habitual ways and forms of educational activity ("technological flexibility").
- Experience of work with information on electronic media.
- Interactivity, orientation on parity relations in communication with a teacher and other students.
- Focus on the inner control in the situation of the teacher's "deferred" mode control.

We will consider below a series of the above mentioned and other features.

2. Basis of distance learning in the distance learning department of MSUPE – a new approach to training and methodological support and arrangement of the educational process, development and implementation of information and communication technologies.

2.1 Training and methodological support

The quality of the distance learning depends largely on the level of training and methodological support. At present, the Bachelor program in psychology at the distance education faculty in Moscow State University of Psychology and Education is entirely supplied with the following tutorial items:

- Electronic training and methodological complexes (ETMC).
- Video-taped lectures.
- Video-guides on psychological diagnostics, professional-counseling and intervention techniques.
- Psychological media library.
- Educational materials on various aspects of learning.
- Information and enquiry materials.
- Interactive test (for self-test and self-control) and other materials (Fig. 1).

The training materials are the education-methodical complexes in electronic form (e-books). By now, we have developed more than 30 ones. 10 complexes were elaborated together with Peoples' Friendship University of Russia (software and engineering implementation). It was done within the framework of the federal program "Development, testing and trial operation of network teaching packages for e-learning in the direction of preparation 020400, 52000 (invariant disciplines of psychology), and in accordance with the nation-wide program "Development of the System of Open Education", launched by the Ministry of Education of the Russian Federation. Many designs for the development of distance learning programs were elaborated in 2007-2008 in the course of implementation of the Innovative educational program "Formation of the system of psychology".



Fig.1.: Items of training and methodological support, developed by the staff members of distance learning faculty in Moscow State University of Psychology and Education.

Alternatively to printed textbooks, electronic tutorials were worked out in a way to provide:

- detailed structuring of an educational course content,
- interactivity (including an easy-to-navigate interface) providing a possibility to change the format of presenting teaching materials in accordance with the trainees' abilities, thus changing the trajectory of learning,
- hypertext structure of theoretical courses, especially in conceptual parts of these courses (links to glossaries and encyclopedias),
- common use of illustrations pictures, schemes, diagrams, drawings and animation,
- utilization of monitoring facilities for self-control, control and assessment of the knowledge received,

 availability of reference system (hyper-references) to printed and electronic editions, electronic libraries and other educational and scientific resources placed in Internet.

Electronic textbooks on fundamental educational disciplines include an educational program, a student book, reading books, an interactive testing system, a practice guidance for electronic textbooks, databases and enquiry materials (vocabularies, library- and Internet-resources) and others. The main feature of the educational-methodological complex is that all its elements are elaborated on the ground of a general approach to the subject matter and the structure of teaching materials provided (Aysmontas 2004).

The faculty members are provided with special guidelines on how to elaborate Electronic Training and Methodological Complexes (ETMC), and are assisted in the process of their utilization.

An important stage in the development of the distance-learning program at the Faculty was the videotaping of lectures, delivered by the leading lecturers in psychological sciences from Moscow State University of Psychology and Education and Psychological Institute of Russian Academy of Education.

All the filmed lectures have been adapted for distance education (structured headings and pop-up text links with key provisions of the investigated subject, terminology definitions, diagrams, graphs, tables, and illustrations), which greatly facilitated the perception and learning. With the same end, all the video courses were supplied with the plans of lectures and captions that accompany all the topics, themes and content questions. Specifically for the convenience of visually impaired students all video courses are transferred into audio mpg3 format.

Another important item in academic and training-methodological support of distance learning at the faculty is the development of video tutorials on *psychodiagnostics, professional counseling, intervention and developing techniques.* The number of such tutorial videos has come up to 12. They contain descriptions of various (both adapted and original), techniques, the history of their creation, the instructions for the processing and interpretation of results, stimulus materials, videos of counseling sessions, video comments and video recommendations on different aspects of psychological practice. The authors of these video guides answer questions, share their professional experiences, and give advice to future experimenters. They also discuss the common errors in the methodology, processing and interpretation of the empirical data, and introduce interesting cases.

To present the content of video courses in a structured fashion we use text-inserts with the titles of the issues under consideration. Text materials are usually equipped with tool tips-notes, making it possible to explore the material, to clarify it or to add to it. Some video tutorials include excerpts from recommended references, thus giving an opportunity to be acquainted with various aspects of the techniques used.

The students of the distance-learning faculty are provided with electronic teaching materials and textbooks, multimedia and information and reference materials on all the subjects. Each student receives for permanent use a complete pack of CD and DVD discs with educational materials for the running semester (tutorial CDs, electronic textbooks, video lectures, video guidelines, and additional materials).

To improve the quality of teaching we have accumulated a kind of a "multimedia psychological library" with an access to the most important public lectures, non-fiction films in psychology and pedagogy, videotaped lectures from research and practice conferences, symposiums, seminars, etc.).

2.2 Arrangement of academic process at the faculty of Distance Learning

- Academic process at the faculty is based on a combination of classroom teaching, independent work of trainees and lessons with a use of Internettechnologies conducted in an inter-active mode (students may choose all the forms of training or only some of them).
- Full-time classroom lessons for students are held in the evening on weekdays and on Saturdays.
- Teachers arrange additional group and individual consultations via Internet to explain separate issues/aspects of the studied disciplines.
- Training is provided on individual plans.
- Moscow students take exams in the University building. Others are given exams in a distance mode through Internet.
- Training according to an accelerated schedule is possible for students with the higher professional or secondary specialized education.

2.3 The development and use of information and communication technologies (ICT) at the faculty of distance learning

Distance learning is impossible without the development and use of modern information and communication technologies in the educational process. One of the most important roles belongs to a so-called *electronic deanery*.

The teaching process of every student in the faculty of distance learning is planned, organized and supervised by the dean's office electronic system OROKS, by means of which the remote control of the organization and conduct of full-scale training is provided.

The network software OROKS was developed at the Moscow Regional Center for New Information Technologies (MRCNIT) in Moscow State Institute of Electronic Engineering.

Since 2011, one more system of electronic Dean's office, built on Moodle system, is being elaborated. It is called MODUS.

Student's personal account in the electronic dean's office is a student's private space and is accessible after the introduction of his/her own login and password. Personal electronic cabinet provides a number of services available to a student user category. Personal account gives way to individual educational plan for the current semester with the description of disciplines, names and surnames of teachers, terms of learning, forms and dates of passing tests and exams. In case of student's getting the second higher education, coming back to study after an academic leave or having a diploma on incomplete higher education, the individual academic plan is drawn up, in which all the years of education, all passed tests, practices and course works are credited.

Students may perform various operations via the electronic personal account:

- Get variants of the assignments and dispatch the prepared ones.
- Find out the results of the work performed and read the teacher's review on it.
- Receive different information about the training process and send messages to any member of the administration staff.
- Dispatch reports on field practices, applications, copies of receipts and other files.

- Have a remote access to information resources: educational, training and methodological support items, scheduled classes, etc.
- Place references to information resources that may be of interest to other students.
- Participate in forum activities: ask questions to a teacher on an academic discipline, get information on any training and/or organizational matter from a curriculum coordinator or any staff member of the faculty.

For students who cannot attend classroom lessons, e-learning at the Faculty is carried out online and they are also provided with videotaped lectures and work-shops taking place in the classroom.

Online classes can be the ones, specially arranged for remote students, and traditional classroom training. Students have the opportunity not only to listen and watch the classroom activities, but also to participate in the discussion in real time via text chat. After the broadcast, students have an opportunity to download audio and video files of the lesson. In addition to the just heard material, there is a list of all previous lessons on page "Online-transmission" in the mp3 format allowing their downloading. The Department is constantly working to improve the quality and capacity of coverage online. Thanks to recent developments, we now can simultaneously broadcast two or three sessions for different groups of students.

Video conferences have been actively used in recent years at the faculty of distance learning. The use of this kind of conferences in the educational process is not limited to the classroom.

Video conferencing in distance education provides instant and targeted knowledge transfer at any distance and thus contribute to the expansion of geography of active learning, exchange of experiences with foreign educational institutions and organizations.

"Educational videoconferencing for distance education provides a huge opportunity for us now to access the Russian teachers, undergraduate and graduate students to knowledge gained in the national research and educational centers, the world's leading universities, to communicate with well-known Russian and foreign scientists, professors and highly qualified specialists. It seems very promising, considering the vastness of the territory of the Russian Federation, the remoteness of teaching centers from each other, as well as the need for the rapid exchange of information between the constantly increasing higher educational establishments of Russia and leading foreign universities" (Krasnova/ Belyaev/ Solovyev 2002).

The Faculty has developed its own *Web application for video conferencing* and its pilot testing in the regular education process proved to be successful. It is integrated into the e-learning system Moodle. An essential means of communication available to the teacher and students is an oral communication in a multilateral video conference. It facilitates interaction between the participants in the form of natural visual communication, provides training materials, checks home assignments, etc. Oral communication, through videoconferencing, helps the students receive educational information, and teacher-monitor learning. It also enhances learning about the individual abilities of students and, as a result, makes it possible to shape a model of current knowledge of each student. The combination of oral communication with various multimedia technologies enriches the educational process and thereby improves the quality of teaching material.

With the help of this program there are planned *Internet-studies* on all academic disciplines in the department. Internet-seminars are functioning in a "point – many points" mode. There are windows of all students on the screen, in addition to the teacher's window, who are able to see each other simultaneously that gives the effect of a live presence. There are students' surnames and initials signed on the screen windows. Students visit the Internet-seminars page in the same way as online transmission, under their login-PW. Analogous to the online-transmission, the "Attendants of seminar" and "Chat" modules are used. Moreover, a teacher has an opportunity to use the "Presentations" and "Virtual board" control output modules in "Internet-seminars".

Through this program, all the scheduled online classes in all academic disciplines can be held. Web seminars are conducted in the mode of "one point-many points". The computer screen contains the teacher's "window" and the "windows" of all the students, which gives an effect of natural interaction. Windows on the screen bear the names of the students. As in the online broadcast, students go to the page "Web seminars" with the help of their login passwords. In the regime of "Web seminars" as well as in "On-line" regime the modules of "seminar participants" and "chat rooms" are used. In the "Web -seminar" regime the teacher is able to use the managing modules "Presentation" and "Virtual Whiteboard". To clarify difficult points of studied disciplines to students, online consultations with teachers are held. Consultations normally involve the analysis of the educational material, insufficiently learned by students. Therefore, the main purpose of consultations is to fill learning gaps of students. The teacher can also clarify the coursework structure, degree paper projects, field practice objectives, and so on. Online consultations of teachers on all academic disciplines may take place in individual and group modes.

Web-seminars and Internet conferences are also used to instruct teachers on the questions of development and application of Information and Communication Technologies (ICT) in the educational process and the creation of Electronic Training and Methodological Complexes (ETMC) relevant to special educational needs of students with limited health abilities.

Video conference technology is used to hosts teleconferences with the leading foreign specialists. Among the recent conferences, the meeting with Prof. B. Rotenberg from Tel Aviv University can be mentioned. It concerned the issue of "Search activity, stress and health". Another meeting, with T. Cottle from Washington, was devoted to problems of "Self-regulation and self-organization". This practice makes it possible to engage foreign experts in the teaching process through extending the range of subjects for study and discussions.

The main task performed by virtual technologies in distance learning is to provide educational interaction between a teacher and students, as close to the traditional one as possible.

In order to improve the quality of distance learning a research program aimed at the study of the efficiency of distance learning has been elaborated. We have designed a questionnaire to examine the quality of electronic textbooks, lectures, video training courses on various aspects of distance learning. The results of the survey help improve educational programs, introduce new tutorial materials, and arrange staff development. As an example, we introduce the results of the study in which we were examining «students' impression of the learning process". It was carried out in March 2012. Distance learning technologies display a significant effect on students ' personal and professional development. Answering the question "In what way does distance learning influence the development of your personal potential?" 70% of respondents answered that "it has significantly contributed to the development of my personal potential".

A matter of influence of distance learning on a trainee's personality development has not been studied thoroughly, though we find if a matter of a special interest.

2.4 Discussion of distance learning issues at research and practice-related conferences.

From 2010 onwards the thematic annual international conferences "Psychological assistance to socially vulnerable people via distance technologies (e-counseling and distance learning)" are organized by the faculty to discuss various aspects of the development and application of distance learning technologies and their efficiency. Another purpose of these conferences is to develop recommendations on psychological assistance to socially vulnerable categories of population (people with disabilities, HIV-patients, people in difficult life situation, people with addictive behavior, prisoners, etc.) with the help of modern distance technologies (like telephone and online counseling) (Aysmontas/ Menshikova 2011).



Fig. 2: Influence of the distance learning on personality development



Fig. 3: Influence of distance learning on learners' autonomy.

Four basic clusters of questions are discussed at the conferences:

- Internet-counseling: Psychological counseling for socially unprotected categories of the population, limited in access to psychological assistance (theory, methodology, organization of services on-line).
- Internet-telephony: Adoption of foreign experience of a distant consulting and psychotherapy (crisis assistance, consulting by telephone and via Internet).
 Adaptation of foreign experience of distant counseling and psychotherapy (assistance in crisis situation, counseling via telephone and Internet).
- Distance learning: Distance learning technologies and counseling for disadvantaged and marginalized populations; problems and perspectives of psychological services as integrated into distant technologies (training counselors, providing supervision, assessment of the efficiency of different approaches).
- Internet addiction: Interactions in "human-computer" and "human-internet" systems; Internet addiction and new perspectives in personality development of children and adults.

3. Conclusion

- Nowadays, the distant training as a form of training is not recognized on a legislative level. Despite the fact that in new "Law on education" the amendments have appeared, a lack of the normative-legal base seriously impedes an application of such progressive and prosperous approaches to the training as a distant training. The world experience analysis shows that distant technologies are the leading ones in the present-day education.
- 2. We presume that a rather prospective direction in the development of the distance training is a taking into account of so-called cognitive styles of trainees. The great importance has a study of factors improving a successfulness of any group or any individual student considering psychological peculiarities of students and teacher in the center of which the cognitive styles are set above all. Cognitive style is a term used in the cognitive psychology for designation of stable descriptions of how different persons think, perceive and remember information or a preferable for them way for solving problems. Up to nowadays there are discrepancies about the meaning of term "cognitive style". Cognitive styles of a cognition process present the base of a successful mastering of one or another area of knowledge. Taking into account of cognitive styles features of trainees in the psychology training process inevitably assumes (along with other elements) an application of individualized methodologies, methods and technologies of the distant training. More various visual means (pictures, video, etc.) are also required for students of a visual type of perception of information in the distance training; for students of an audio type - perception of information, logic diagrams aurally. Students of a kinesthetic type will prefer better interactive assignments and practical assignments. An account of cognitive styles may give a new stimulus when adapting the available tutorial materials for students with different nosologies.
- 3. However, as our experience showed, a majority of students possess insufficiently developed skills of planning their own time, work with academic books, methods of efficient remembering, etc. Their sets are to be considerably changed in the course of learning and foremost, to form a customer's position for one's own education. In view of this, a development of a complex program is required on a psychological-pedagogical support of their learning, consulting, training with application of more efficient methods of academic and cog-

nitive activities. One can point out that psychological and pedagogical foundations of the distance learning as a whole are insufficiently developed in the domestic pedagogical, psychological-pedagogical sciences as well as in practice. As a rule, more attention was paid to technical and organizational aspects of distance learning. The existing experience shows that both employees of the department and teachers have to become tutors, experts on development of adults by means of education, but not just administrators, supervisors who are willing to instruct and primitively demonstrate their power. Unfortunately, overcoming of such stereotypes, persuasions and transition to another outlook of a student in the personality-orientated training paradigm has turned out to be a great problem (Shennikov/ Teslinov/ Tchernyavskaya 2006).

4. A quality of distance learning depends on competence of a professorial-teaching staff not only in the appropriate psychological field but as well in the field of information-communication technologies, namely, the distance training. As our experience has shown, the most efficient training with the help of the given technologies is possible when they are applied and improved simultaneously. For purposes of a more profound learning via distance learning methodologies, the dean's office has arranged a course of the English language in a distant form for the lecturers of the faculty. One can also note that a number of problems concerning a raise of teachers' motivation to use the distance learning technologies are associated with a lack of the normative-legal standardization base and remuneration of labor for teachers, using ICT.

We have enumerated certain problems and prospective ways of development and application of the distance learning technologies in the field of higher professional psychological education. Our ten-year experience of work in the given area has proved that the said technologies are a powerful factor of the educational system development. They are a unique incubator in searching for new approaches to learning, experimental site for development of new methodologies and training technologies, educational environment for a progress of not only students but also teachers. Training based on application of formation of contemporary ICT requires another comprehension of the sense of education: a student him/herself becomes a customer on education. Formation of students' need and ability for selfeducation and self-development becomes a value of education. A competent usage of the available developments may appreciably change the higher psychological education in the whole in diverse forms of training, since in such education a student becomes the key figure, his needs, his interests and bents, and the aim of managers in education is to create the optimal conditions for his/her progress and self-development. By means of the distance learning technologies, we are able to proceed from the "pedagogy of compulsion" to the "pedagogy of motivation". One question left: to understand and analyze the values of education as well as one's own understanding of education.

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