# DISTANCE TRAINING AS INNOVATION AND OBJECTIVE NEED FOR MODERN HIGHER EDUCATION

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Abstract: In the search for opportunities to solve the variety of global problems faced by humanity, the discovery of education as the main possible key to their solution was attained at the beginning of the new century. But, not just education as an opportunity for attaining a high intellectual level, for a certain period of time, by every person, but an education of a continuous (lifelong) nature. This has led to a clear shift in the "learn to live" paradigm to "lifelong learning", which has created a premise for rapid and serious reforms, especially in the higher education system. A wide range of innovative ideas have been launched. New educational technologies have been developed. A new review and reading of traditional training methods and approaches has been challenged in order to achieve greater efficiency in their implementation. One of these ideas was related to the introduction of distance learning in response to a clearly identified need to meet the ever-increasing need to obtain education from different groups of people who, for one reason or another, are unable to get involved in the forms of traditional education. All this drew attention to a deeper study and clarification of the essence and specifics of distance learning as an innovation in meeting the objective needs of modern higher education. The emphasis on innovation in the education process is based on its ability to bring about qualitative changes to systems and ways to increase their effectiveness. It is also considered as a necessary basis for the transition from an old to a qualitatively new state of education based on a revision of the existing normative positions. It is also defined as a phenomenon that does not arise on its own, but is the result of long-standing scientific searches.

**Keywords:** education, continuous education, distance learning, innovation, objective needs, system and structure for distance education

#### 1. INTRODUCTION

The new century outlines mankind in a dynamic and complex situation to solve a variety of global problems. A circumstance that naturally imposed dynamics and the search for opportunities to deal with these issues. Interesting, but not unexpectedly, as a reliable outcome of this situation, education was defined in terms of its continuity and multiculturalism. Moreover, it was also established as a fundamental principle of the development and implementation of the educational policy globally, in the direction of a decisive transition from the paradigm "learn to live" to the paradigm "lifelong learning". "It was the paradigm that laid the foundations of the educational reforms in our time and connected them with the transformation of education into a life-long process, guaranteeing the progressive development of the creative potential of the personality and the universal enrichment of its spiritual world (Egorov, Skibitsky, Hrapchenkov, 2008).

According to UNESCO, continuous (lifelong education) includes the whole process that forms a person's personality, with a major focus on learning. Therefore, it is meaningful, its primary purpose defined as the final and desired result of this education, the possibility for each person to learn to study independently throughout their life, regardless of their age, residence, initially obtained Occupation, taking into account, of course, his individual abilities, interests and interest (Eggorov and col., 2008).

All this gave a serious impetus to creative thinking and contributed to the initiation and deployment of a wide range of innovative ideas, the development of new educational technologies, the implementation of more effective methods and learning approaches.

#### 2.NATURE OF INNOVATION AS A BASIS OF REFORMS IN EDUCATIONAL PROCESS

The emphasis on the educational process is not accidental, as only innovation has the ability to produce certain qualitative changes in the systems and remedies for their efficiency, stability and vitality. Therefore, it is considered as a necessary basis for the transition from an old to a qualitatively new state of education, based on a review of the existing normative positions. It is most often defined as a phenomenon that does not occur on its own, but is the result of years of scientific research. This understanding is embedded in the meaning of the term "innovation" (from Latin"innovatio"), "renewal", "innovation", "modification", of a phenomenon that distinguishes it from its original state. In addition to the pedagogical process, the innovation acquires importance of modifying the objectives,

content, methods and forms of training and education, the organization of the joint activity (Slastenin, Issayev, Shiyanov, 2008) of the learner (the teacher/the lecturer) and trainees (the pupil/the student) as a whole. These amendments, in the field of modern education, are justified by a number of circumstances (Slastenin and col., 2008):

- the dynamics of socio-economic changes in society;
- consistent and systematic humanization and democratization of the content of education (in terms of volume, teaching subjects, introducing new subjects, etc.);
- creating better conditions for studying, analyzing and implementing pedagogical innovations
- directing training in educational institutions to market relations and creating conditions for their development and improvement, in order to achieve higher professional competence, competitiveness, mobility, etc

In time, innovation has exceptional dynamics, which is often identified as its life cycle. It reveals it as a complex system that develops naturally in time (changing through the transition from one stage to another), in connection with and interaction with the environment. From the point of view of pedagogical science, in terms of activity, as a specific form of human activity in relation to the environment, it can be assumed that the innovation activity is aimed at transforming this environment, based on the it focused on efficiency through the implementation of new methods and tools.

Starting from the main goal of continuous "lifelong learning" - each person learns to learn independently throughout his or her life (Egorov et al., 2008) regardless of his or her age, place of residence, originally occupied, taking into account his individual skills, motives and interests, as well as the importance of innovation for the change of objectives, content, methods and forms of training, the organization of the cooperative activity of the trainer (the teacher, the lecturer) and the learner (the pupil, the student) to emphasize, in a discussion, the essence of distance learning as innovation and the objective need of modern higher education.

#### 3.HISTORY OF RISE AND DEVELOPMENT OF DISTANCE TRAINING

From the outset, it should be noted that the idea of distance learning is not new, but has an enviable history. His first appearance dates back to the beginning of the 12th century, and more precisely with 1728, when Caleb Phillips organized a course on stenography, through exchange of letters, through distance education (education) (Petkova, 2015). According to distance learning researchers, Jan Amos Comensky, who introduced the first illustrating textbooks, is the pioneer in this field.

A comparatively more detailed answer to the question: "When did the first time remote learning occure?" gives M. Пьянников, , who divides and examines its story in four main stages, called informational revolutions.

The first stage, according to the author, is related to the emergence of language as a means of communication.

The second stage is associated with the invention of writing and print writing in the middle of the 16th century, which radically changed the ways of transmitting and storing information on paper.

The third stage covers the first half of the twentieth century and is associated with the emergence of electricity, telephone, radio and television, which are almost immediately implemented in educational practice (Petkova, 2015).

The fourth stage is due to the emergence of computer technologies (Пьянников, M, 2011) and the invention of the Internet.

Today, it is possible to highlight the next (fifth) stage in the development of distance education, based on the opening of multifunctional mass online courses i.e. on platforms that offer their users curricula developed by different universities.. It is precisely the wide range of possibilities of distance learning for the internationalization of educational structures of different purposes, becoming the basis for being recognized as one of the key strands of the UNESCO basic education programs "Education for all", "Lifelong learning" "Education without Borders" and others.

All this outlines the need for the ever clearer and more convincing highlighting of its specific signs, which are considered to be fully adequate in terms of the objective needs of modern higher education (ibid.):

- flexibility;
- modularity;
- parallelism;
- impact at a distance;
- asynchrony;
- range (mass);
- profitability;
- use of information technologies it is the possibility of using new technological means of transmission of information (computers, audio-video equipment, systems, telecommunication devices, etc.).

#### 4. EXPERIENCES FOR DEFINITION OF DISTANCE TRAINING

The broad spectrum of the peculiarities of distance learning creates prerequisites for diversity in terms of its definition (see Table 1). The definitions proposed in Table 1 do not completely deplete the contents of the distance learning. In some cases, it is defined as a "method" (Mielke -1999), in others as a "form of training" (Andreeva - 2010) (Polat -2004), and in a third - the need to refer to general concept (Hill 1997, Willis 1997, Moore 1996, Keegan -1993). The complexity of the distance learning phenomenon is most often explained by the influence of various factors on it (Raicheva, 2011), such as:

- distance (separability) of the teacher and learner in the majority of the learning process;
- use of teaching tools that combine the efforts of the teacher and learners with the quality of learning content;
- providing interaction between the teacher and learners, ensuring interaction between the teacher and learners, as well as between the learning administration and learners;
- determination of the role of self-control over the control by the teacher.

According to M. Atanasova, it is precisely the impact of the diversity of factors on distance learning that determines the diversity of its main features (ibid.):

- in the learning process, in remote form, attention is focused on the achievement of the objectives of learners
- the development of the training courses takes into account the experience and the level of their training;
- the training also takes into account the individual characteristics of the learners and the particularities of the environment in which they work or will learn;
- the distance learning course takes into account the learning style and approaches of the learners, and the teachers treat them with respect and patience;
- promoting both independent and collaborative learning;
- focusing on the development of self-solving skills and project development;
- creating conditions for improving both self-assessment skills and interaction skills with other learners.

Regardless of the available diversity of perspectives and approaches regarding the definition of distance learning, as a meaningful, bringing together accent, it can be understood that distance learning is a modern form of distance learning where the teacher and trainees Physically located in different locations, and a media link is used to carry out the pedagogical interaction between them.

Furthermore, as a form of training, along with other existing forms, distance learning is applied in practice to gaining education through the use of traditional and innovative methods and tools based on computer and telecommunication technologies.

We also find a similar justification in the definition of T. Totkov and collective, which come to the summary that this type of training is a "set of forms of the organisation, management methods and training facilities involving heterogeneous (by type and Functional purpose) and various (on the place of deployment, mode of participation and time of use) human, material and information resources "(Totkov T. and col., 2010). Interestingly, in our view, the study of the problem of clarifying distance learning as innovation and the objective necessity of modern higher education is the experience of other Bulgarian authors to expand the spectrum of the vision of its main characteristics, namely (Milkov, Markov, 2002):

- in this type of training, teachers have a wide choice of media (or way of providing information) printed textbook, television, video or on-line connection;
- the learners can choose a place to learn at home, at work, in class, or in university campus;
- there is a possibility of choosing a pace for the study of the disciplines from the pre-established curriculum, the sequence in the arrangement of the subjects and their corresponding curricula with thematic cycles, titles, sections;
- ability to choose the necessary or desired assistance-from a teacher, computer program or audio conference;
- possibility of selecting the stages for inclusion of the students and the terms of completion of the training.

#### 5. DISTANCE LEARNING AS AN ORGANIZATIONAL FORM FOR TRAINING

Understanding and viewing distance learning as an organizational form reveals its close connection with distance education, which in turn stands out as a special, perfect form combining elements of regular, part-time and evening learning or mixed form of education based on the application of new information technologies and multimedia systems that allow to overcome existing shortcomings in traditional forms of training on the one hand and to preserve them all our values (http://cdo.bseu.by/about/DA.htm). According to the authors mentioned above, apart from the signs of autonomy, character of the information carrier, remoteness, distance learning classifications are also possible according to the time

and place criteria, namely: synchronous training (at the same time) and asynchronous training / at different times) (Milkov et al., 2002).

Attention should also be paid to the fact that the distance learning process is not distinguished from the organization and management of the traditional educational process, with the exception of the emphasis on learners' self-employment and the system of interaction between the main subjects of the process (Pedagogical Technologies Distance Learning, under the order of E.Polat., 2008), since the creation of a distance learning system is limited to the organization and implementation of a specific pedagogical system, and represented several major subsystems, typical for traditional educational process (http://cdo.bseu.by/about/studiing.htm):objectives, content, methods, means, organizational forms of training, etc..The very establishment of such a pedagogical system, however, is an extremely complex process as it is a mandatory element in the organization of distance learning and creates a prerequisite for organizing a learning process in such or another form of Pedagogical Technology Distance Learning. Under order. E.Polat, 2008). In its development, two main stages can be clearly identified: pre-design and organizing and conducting a learning process.

**Table 1. Definitions of distance Learning** 

№	Author	Definition
1	Егоров, В.В., Э.Г.Скибицкий, В.Г.Храпченков	set of educational services that are provided to large sections of the population with the help of a specialized information and educational environment based on the means of exchange of learning information at a distance
2	Волов, В.Т.	form of education that provides the use of new technical resources and information technology to deliver training materials and information directly to the user's location
3	Агронович, Б.Л.	didactic, technological system of personally oriented continuous education, which is realized with the help of virtual information-educational environment and operational communication
4	Андреев, А.А.	a system in which a distance learning process is realized and an individual achievement of an educational level is achieved
5	Тихомирова, В.П., В.И. Солдаткина, Д.Э. Колосова	pedagogical system in which a distance learning process is carried out to confirm an already achieved educational attainment
6	Андреев, А.А.	a system in which a distance learning process is realized and an individual achievement of an educational level is achieved
7	Хил, Дж.	guidance to a person trained in a different location and at different times from the teachers or other learners, through print or electronic media.
8	Уилис, Б.	the distance learning is characterised by the physical remoteness of a teacher and trainees, the connection between which is carried out using various technologies (sound, picture, printed media, etc.).
9	Миелке ,Д.	Distance learning is a method by which the learner is physically separated from the lecturer and by the educational organization
10	Мур, М., Дж. Карслей	a planned process that takes place in a place other than the place of instruction and as a result requires: the development of a project, the selection and application of teaching and communication methods by electronic and other technologies, as well as specific organizational and managerial methods.
11	Spodick, E.	a form of learning beyond the traditional forms of education and presence in educational institutions, that is to say, as a distance education that provides opportunities for education everywhere, anywhere, at any time

The complexity of the pedagogical system of distance learning stands out with particular sharpness and the problem of involving more than one leading entity (lecturer), especially in the stage of organising and implementing the learning process and finds justification in The theory of distance learning, according to which it is carried out by two types of teachers: those who conduct auditorium classes (basic, leading teachers) and those who organise and support the selfwork of Students (tutors) (Pedagogical technology remote trainings, In order, C. S. Polat, 2008), According to U. Merkelova, the builder is a specialist who accompanies and supports the process of self-education; Development and implementation of individual educational projects and programmes; consults the trainees; A special type of educator who works on the principle of individualisation of the learning process in relation to the application of the personal-oriented approach (Markelova, 2013). Summing up various views and opinions on this issue, the author quoted suggests that when determining the function of the tutor, the tendency to individualize the learning process should be guided by the application of the personality-oriented approach. Ie. to take into account the emergence of an important pedagogical tool in its activity - the development of individual educational programs for the trainees (Markelova, 2013), based on highlighting the educational problem to be solved in the framework of the student-student interaction by: defining the educational needs, interests and abilities of the students; horse rating the very educational situation (the conditions in which the training will take place); designing specific steps that make up the student's individual educational path (ibid.). All this, according to Y.Markelova, goes beyond the scope of organizational and support activities of this specialist, as he also works in other areas (Markelova, 2013): project, organizational-motivational, informative-consultative, analytical, reflexive. At the same time, it should be emphasized that the tutor is only one of the members of the team of specialists who are needed to ensure the effectiveness of the distance learning course. Each team needs to include a methodologist, programmer, and designer, system administrator, and other types of specialists who can be useful in developing and implementing a course.

## 6. STRUCTURE OF THE RELATIONSHIP BETWEEN THE COMPONENTS OF THE PEDAGOGICAL SYSTEM IN THE DISTANCE FORM OF TRAINING

Another important issue in the process of clarifying distance learning as innovation and the objective need of higher education is the problem of its structure and, more precisely, the relationship between the components of the system of this structure. According to M.Mur, the clarification of this problem should be based on the application of the "use of common technique in system modeling: a system view from the point of view of the input-output relation" (Moore, Kearsley, 1996) are defined at two levels: the macro level and the micro level, the first one usually includes: selecting the type and order of organizing and conducting the course, as well as choosing a model for the presentation of the teaching material in accordance with the chosen presentation logic of the content, micro level, in turn, directly affects the order and connections between elements in themselves teaching materials.

The content of each training course is usually presented in separate modules. Modular learning is seen as an innovative didactic system that provides individualization of learning and has the following features (Vasileva, 2016):

- provides a study of each component of the didactical system as a relatively independent, functionally oriented fragment of the learning process with its own program-target and methodological support;
- presupposes a clear structuring of the learning content of the training, a consistent presentation of the theoretical material, provision of the learning process with methodological materials; the existence of a system for evaluation and control of the acquired knowledge, allowing adjustment of the training process;
- provides variability of training and adaptation of the learning process to individual opportunities and needs of learners.

The possibilities for the applicability of one or another distance learning model, such as a precisely designed pedagogical system, are directly dependent not only on the clear and accurate design and optimal organization and management, but also on the effective interaction that will be built up between teachers and learners. Considering that the majority of the participants in distance learning are elderly people, the first stage in this relationship is "Motivation." According to V. Gurova (Gurova, 2016):

- • adults are autonomous (independent learners). they want to take on more responsibility for their own learning at all costs, but they often lack knowledge of the subject (or field of study) and this limits their right to control at least at the beginning of the course;
- adult learners also differ in their self-control experience. giving students the freedom to act, who can apply self-control, the teacher would support their natural advantages, but may also place some of the self-confident learners in an unfavorable position;
- adult learners also differ in their learning styles. Even if the teacher is inclined to adapt the programme and the training style to the requirements of the learners, this may disrupt the already built learning style of learners.

According to a number of scientists, the course's own program has the strongest impact on student motivation: "the attitude of content towards the careers or the interests of learners; the difficulty of the course (including the time budget, the effort required); the level of learners; the nature of the media used for the course and interaction; the nature of the movement; the number and nature of feedback from the instructor or tutor; number and interactions with instructors, tutors, etc. learners "(Moore et al., 1996). Motivation is in direct connection with the program's creator's ability to take into account and include the specific features of the user's motivation sphere. In this case, the role of the tutor in instigating and maintaining "the students' inner conviction in the need for purposeful efforts to assimilate them as useful knowledge and skills" (Gurova, 1998) should also be defined as key.

There is no doubt about the role of the media in terms of motivation, but on the condition that account is taken of the impact and other factors that affect it, such as: the theoretical foundations of the program, the pedagogical competence of the training team, the relevance and significance of the knowledge set and skills, etc. The next stage is "The Organization", ie. the type, the form, the structure through which the learning content reaches the learners. Typically in practice, the main organizational forms are: lectures, practical and laboratory classes, seminars, coursework and diploma projects, consultations, self-employment, etc. Therefore, the application of modern technical means, especially in the distance form of education stands out as an essential condition for achieving high efficiency.

Leading component in the learning process is the target, which is a kind of forecast for the final, expected and desired result of theoretical and practical acquisition of the course contains, we (Raicheva, 2011). In the conditions of higher medical education, the objectives are applied in the formulation of the so- a taxonomic approach that favors the proper planning of multifaceted activities in the education process; proper targeting; the clear justification of individual cognitive stages and learning structures; the justification of the model of teaching activity; the proper selection and design of procedures for monitoring and evaluating the results of the learning process; the objective diagnosis of learning problems; the individualisation of training, etc. Considering their relevance to the needs of medical education, mainly in the direction of objective assessment of knowledge, skills and competencies of students early 1963 S. Mc Guire offers a simplified classification (using that of B. Bloom) assessment of knowledge medical students. According to J. Jacques Gilbert, she is also adapted to conduct tests (Gilbert, 1976). In 1967, the same author simplified the classification and reduced it to three areas with three levels.

Next is the content component that includes selection and structuring of the content. It is well known in the scientific literature that learning content is a collection of all the knowledge, skills and competences that trainees learn in the conditions of the educational institution, the quality of which depends on their future active adaptation and realization in society. Understanding the content of the learning process, in this aspect, outlines its selection as extremely complex as it is conditioned by the impact of a number of factors, including the goal (s), the time available for passing on the learners, the specificities of the learners themselves: age, stage of training, experience, specialty and professional qualification to be acquired, the location of the learners, the training models, the training conditions, the experience and the qualities of the teacher and the tutor and other Nove team link content with one or the other / other school dis-discipline, etc.

A third step is the understanding of the study material. This stage is considered to be extremely important and, at the same time, extremely critical to learners as it is directly related to their intellectual activity. It is important to select the different types of activities of the learner, structuring them according to a certain theoretical concept, which will ensure the acquisition of knowledge and skills of the learners as objectives of the training.

As already noted many times, self-employment as an organizational form occupies an important place in the distance learning process. This is due to the increase of its relative share in the organization of the educational process, which, with full methodological provision of the disciplines, can reach up to 2/3 of the students' semester workload. By increasing the share of independent work in distance learning, the information field in which students work is expanded. They can use not only printed information, but also various electronic publications, resources, networks, Internet databases, catalogs and e-libraries, etc. The organization of individual or group autonomy implies the use of new pedagogical technologies: project method, cooperative learning, research and problem-solving methods, etc. In the system of distance learning, the reproductive level is particularly effective in solving tasks, completing computer tables, circuits, conducting independent practices using computer simulators, etc. Creative beginnings are realized primarily in the preparation of course and diploma research projects or projects in connection with the research work of the students.

The effectiveness of the learning process is also conditioned by successful face-to-face communication, which is largely related to distance learning across networks.

In the application of each model, in the conditions of distance education is especially important among all the participants in the course to build and for a short time "a society from of equally-minded people." Compliance with this requirement points to two types of communication: remote and virtual, which is typical for network models and integration models. The specifics of virtual communication in a network, according to and. S. Polat is expressed in the following (Pedagogical technologies remote trainings, under order, I. S. Polat, 2008):

- communicating participants in distance learning on the Internet usually takes place in verbal form (in case video conferencing is not used), whereby they acquire new social roles: everyone can imagine what others want to see; everyone has time and opportunities to adapt to the new environment (get to know the other actors, to assess the location of the forces, to develop their communication tactics, to check their capabilities, etc.);
- communicating in a virtual environment creates prerequisites for "blurring": students with greater ease ask these
  questions, which in the traditional form of training would refrain from asking; The mimics and gestures are
  absent, which, on the one hand, makes communication difficult, but on the other hand, it allows the creation of
  greater openness between the entities, of course according to the level of culture in the respective message; •
- communication in a network has its own specificity, which is determined by the fact that in the Internet there is a change of the leading touch channel with visual, that is, the learning information reaches the learners through the computer screen, a circumstance that necessarily requires The consideration of the creators of different means of training, already in the process of their design, with the psycho-physiological peculiarities of the perception of information by man in visual form.

In distance learning, there is a growing need for the organization of permanent support for students by the teachers. An important part of it is the consultative activity, which is complicated in terms of the didactic goals: on the one hand they are kept as independent forms of organization of the learning process and on the other they are included in other forms of educational activity, such as lectures, practices, seminars, laboratory practices, etc.).

The "Control and evaluation" stage refers to the establishment of the quality and the degree of assimilation of the knowledge, skills and habits of students, in their totality, interconnectivity and modality. And this is because the student is obliged to find out whether he has managed to absorb the teaching material on the one hand, and on the other hand the lecturer is obliged to convince the successful learning content of the learners and to assess its level. It is also important that the teacher is sure that at the other end of the telecommunication there is this person who claims to receive an official document for the practical application of the acquired competences (diplom, certificate) (Raycheva, 2011).

#### CONCLUSION

The analysis of various literary sources gives reason to conclude that in fact distance learning can be defined as innovation aimed at meeting the objective need of modern education to meet the constantly increasing educational needs of large groups of people who are at distance from a relevant educational institution. It gives them the opportunity to self-organize learning at a time that is most comfortable for them. Although in terms of planning and organizing, distance learning has significant similarities to traditional learning, it has its own specificity, which must be taken into account in the preparation of each educational course, as well as taking into account the personalities of its users.

#### **LITERATURE**

Egorov, B.V., Э. G. Skibitzky, WG Hrapchenkov. (2008). *Pedagogy of the Higher School.*, Novosibirsk - http://txtb.ru/82/index.html

Gilbert, W. G. (1976). Pedagogical Guide for Teachers in Medical Schools. Sofia, p.117

Gurova, V. (1998). Andragogy. The Art of Teaching Adults, Sofia.

Gurova, V., V. Bozhinova. (2008). Forming Learning Skills, Sofia.

Markelova, YU (2013). *Role in the system of distance education.* / Philosophy and history of education. Pedagogy and teaching methods. // Notifications in the Inbox. Series «Гуманитарные науки», 4., Москва.

Milkov L., Z. Markov. (2002). *The Challenges of the 21st Century on Education and Training*, Sofia. [7]. Pedagogical technologies distance training. (2008). Under order. IPPolat., Moscow- http://www.academia moscow.ru/\_books/fragment\_4773.

Moore, M., G. Kearsley. (1996). Distance education: A systems view, Wadsworth Publishing Company

Petjkova Y. R. (2015). *History developed distance education. положительные и отрицательные стороны MOOC* // Успехи современного естествознания. No 3 URL:www.rae.ru/use/?section=content&op=showarticle &article\_id=10003602

Peyannikov, M.M. (2011). Kosposu ou stories distance education. ∕ Pedagogy and Psychology №5 (40)., Chita

Raicheva, N. (2011). *Distance learning as a pedagogical fact: essence, structure, functioning.* / RTI & gt; of the Sofia University "St. Kl. Ohridski" for e-learning., issue 2. Sofia.

Slashtenin, V., I. Isaev, V. Shiyanov. (2008). Pedagogy, Moscow.

Totkov, G. and kol. (2010). E-Learning in the Information Society: Systems Models, Accessibility and Quality, Plovdiv.

Vasileva, V. (2016). *Technology of modular training for adults.*/ Proceedings of university of ruse. Vol. 5, book 11, pp. 59 http://cdo.bseu.by/about/DA.htm