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## E-learning as a Model of Lifelong Education for Older Adults

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### Abstract

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The article deals with the specific information about main resources of E-learning education for older adults. Programs and policies that encourage lifelong educational resources and practices by older persons are needed. These included education level; self-study in the form of reading manuals, reference books and journals; computer/Internet use, use of the library; leisure reading of books; reading letters, notes and e-mails. Ways of application of Information Technology in older adults teaching process are given. Lifelong education enables older people to gain self-confidence, show their creativity, and share their skills and experience. Education becomes a special need in the realization and protection of older adults of their rights and clarifying the responsibilities, taking responsibility for their own destiny. The elderly are the most socially vulnerable group in need of a decent quality of life and health. At the same time, there is an increasingly significant need for the development of social services such as education, health care, medical services, vocational training and the retraining of the elderly.

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### 1. Introduction

In the life of older adults two main stages can be distinguished. On the first stage a person solves professional problems, forms a family, brings up children, and makes some preparations for later life. On the second stage (old age) the problems vary: the main task becomes the transmission of experience, healthcare, finding a meaningful lifestyle and, finally, preparation for the end of life. At each stage, a person needs his own education system.

George Bernard Shaw (1856-1950), a wonderful English writer, a great lover of life and long-liver in a conversation about old age pointed that there was no age for people with living soul, and mind, for people who feel life with all five senses. Old can be young, but you can live a long life, without

knowing it completely. A man often dies earlier than he exhausted his spiritual and mental strengths. And if the youth is the element of passion and emotion, old age is the element of thought, creativity and intelligence. Education of older adults is just intended to help in the development of these qualities.

## **2. Main text**

### *2.1. Problem Statement*

Today connection between the level of education, the degree of involvement in the educational process and life expectancies found. Updating your knowledge in old age a person can changes the lifestyle, consumption culture, attitude to diseases and loss of some functions.

There appears a new system of values - often more pragmatic, adapted to the new period of life and oriented on the dialogue with the generations.

This type of social learning refers to the informal education, having the purpose of personal development, social adaptation, keeping the active position of the older adults. Communication and obtaining new knowledge allows students of retirement age realize their ability to remain independent and be less prone to stress during that difficult period of their lives. Continuous motivation of older adults in the course of their training allows seeing new sides of their self-realization. It is also important that the classroom teaching of the older generation helps to develop the ability adapt in the new conditions of life.

### *2.2. Purpose of the Study*

The main objective of gerontology education is to increase the quality of older adults live by expanding their educational opportunities. There is a struggle in the world for the fact that people of the “third age” were not doomed to a passive lifestyle. Scientists prove that longevity and strength of the physical body are quite compatible and depend on including the active participation of people in educational activities. Many European countries have considerable experience of older adults' integration into society. It should be noted that only through education elderly people can develop their intelligence and destroy the stereotype that has emerged in many of the generation of the “third age”.

Training programs for this category of citizens are based on psychological and sociological studies, taking into account their experience and diverse interests, the range of disciplines is quite wide: medicine, law, psychology, economics, ecology, foreign languages, gardening, local history and information technology is the main element of the implementation of the idea of lifelong learning. Training of this category of people is based on those peculiarities.

Modern teachers are increasingly using a huge amount of resources: electronic, online and paper (book) in teaching a foreign language. Modern devices, smart boards, high-speed Internet are evolving rapidly (Novikova, & Beskrovnaya, 2015).

Very often, poor health, reduced physical activity, depression, negative learning experiences in the past are the limiting factors. E-learning helps to eliminate those causes that affect the lack of desire to continue learning. Using computer technology has positive effect on the personality of the older adult and significantly increases the motivation for continuing education.

Lifelong education enables older people to gain self-confidence, show their creativity, and share their skills and experience. And this is certainly valuable. Adult Education in the retirement age is not intended on obtaining profession and future employment. Here an important role is played by the moral support of people who have reached the retirement age, reducing the risk of social exclusion of older adults in society, achieving mutual understanding between the generations.

At present elderly people mostly do not relate to the old age as a period filled with new meaning, a new socio-psychological state, and a new position. They seek to continue habitual rhythm and pace of life. The inability to preserve the former relations causes dissatisfaction, social isolation, and alienation.

Education becomes a special need in the realization and protection of older adults of their rights and clarifying the responsibilities, taking responsibility for their own destiny. Older adults require knowledge, competence for healthcare and longevity, skills for daily activities, hobbies, social work, attendance to peer and youth on preservation of intergenerational relations.

A new stage of socio-economic and technological development of the society put on the first place creating of a unified system of continuous education as one of the most important tasks. This system is a complex of state and public educational institutions, providing organizational and substantial unity, continuity and interconnection of all parts of education. They share parenting tasks; secondary, vocational and other training of each person, taking into account current and future needs of the society, satisfying his desire for self-education and self-development throughout life.

One of the major tasks of lifelong education, which has a clear social and pedagogical orientation, is to create conditions for the full and harmonious development of every person, regardless of age, originally acquired profession or occupation, place of residence, but with the obligatory account of his individual abilities, motives and interest, and values.

To create a single system of lifelong education is one of the most important factors in increasing the intellectual potential of the country, the implementation of the principle of social justice, the convergence of social groups, increasing social and political activity of people

In the center of the learning are creativity, practice, analysis and synthesis of knowledge. This learning is based on cooperation and is lifelong.

The traditional learning model differs from the model of lifelong learning by a number of important parameters.

The main purpose of lifelong education is a social impact on the person in the preparation to the old age, identifying potential resources for development and self-development, integration into the social life for an active, productive, competent work. The use of modern information technology tools is a key model for lifelong learning.

A characteristic feature of the XXI century is a global computerization. The development of computer education system implies exposure, including senior citizens, to new information technologies. And this can only be achieved through lifelong education.

Internet has already become an integral part of our life and irreplaceable means of communication. However, not all are able to take full advantage of Internet technologies. Older people, for example, are very far from all of these social networks, e-mail, and other attributes of the on-line world. Especially lonely elderly really need not only lifelong education, and especially the learning of modern

communication technologies. You can, of course, do without a computer but it can significantly facilitate learning and make it more interesting and effective. For an elderly person a computer opens up a number of additional features. Having received basic knowledge of work with computer, older people begin to explore more and more new programs that allow them to continue their education to feel themselves important and popular member of the society. E-learning for older adults is a prerequisite for lifelong education, regardless of their physical condition and place of residence.

E-learning has become a solution for people who want an acceptable and rationale way to learn from the point of view of time and space. The contemporary era has enhanced the accomplishment of new and complementary competencies eliminating borders between people and knowledge through the proliferation of e-Learning worldwide. During the last years, the interaction between professors and learners in online educational environments has been considerably improved, especially by developing new tools and implementing different functionalities that integrate intelligent data analysis techniques. More and more software companies specialized in e-learning and research centers use computer-supported cooperative tools to overcome the geographical distance and benefit from access to a qualified resource pool and a reduction in development costs (Burdescu, 2015).

Education of older adults using multimedia technology does not require special attention from the teacher, because older people are better than anyone else know how to focus on the subject under study and not be distracted by other thoughts. Nevertheless, older adults are still not fully confident in their abilities, as they believe that new skills are better for the young. This problem can be solved, if competent approach and the right teaching method are selected. Of course, older adults are not so much in need of knowledge about everything, but if they want to live an interesting life, they should learn as much as possible ways of obtaining information. Electronic resources are in the first place.

Older adults often use computers and the Internet for the same activities that younger users are known to, but do different activities to different extents. Although their activities are similar, older users tend not to take advantage of many of the more advanced tools available online as much as their younger counterparts (Wagner et al., 2010)

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### **3. Methodology**

#### Application of Information Technology in Older Adults Teaching Process

##### 1. Using cloud technologies

Using cloud can save time on purchasing, support, software and hardware upgrades. Remote access to cloud data allows the user to work from any place where there is an Internet access and a browser. Accessibility is an advantage of cloud technologies. Cloud technology allows older people to work remotely.

##### 2. A tablet, a smart phone and a laptop

It is interesting to work and study using modern information technologies for people of any age.

3. Virtual community is a great source of information, which may include a virtual university with reference to all sorts of useful resources, a social network for communication, e-learning courses.

Visiting the virtual community can be used as a task and as an option for distance education. The community is constructed in such a way that a user can develop his computer skills in the course of interaction with the site.

This is a unique system of quality and accessible distance education, which increases the level of information culture of elderly people and enables to immerse you in the most diverse areas of knowledge.

Copyright courses are arranged on the portal where structure, volume, content and methodology are full university courses in the field of culture, psychology, history, literature, etc. All courses have a variety of multimedia support that will help to develop them more easily and confidently.

With ageing, there is a change of habitual way of life; as a result, there are difficulties in access to traditional teaching methods. During the last quarter of XX and beginning of XXI centuries at the time of the informational support process in modern society, the phenomenon of the informational inequality has been formed in relation to the older adults. Having access to modern information technology, retired people could learn independently, using information resources, including virtual ones. Information inequality in relation to older adults is deepening, promoting isolation of the older generation from social participation in public life. Now, it is important to give elderly people the tools to adapt quickly in the exploring of new information technologies. Older adults need to be socially active, receive timely the required information in various fields, and this is the main condition for lifelong well-being.

Studies show that retired people especially those aged between 55 and 70 years want to acquire new knowledge in the field of psychology, culture, science, languages. It is said that the age is rather a state of mind and depends on the character but the aspiration to study and develop abilities remain in human life for a long time. Nowadays, however, to satisfy the needs of education for everyone using traditional model of education is not possible because there are difficulties with a premise for training, with qualified personnel, material and technical equipment. Older adults want to be active, socially demanded, to promote the welfare for others. Information technology should and can improve the quality of elderly people's life.

Text editors, e-mail make written communication easy, solve the problems of geographical mobility, and make information more accessible.

Attention to the problems of the third age and the use of information technology is formed under the pressure of two major trends of today - the aging population and the modern digital revolution.

The share of the third age people today is up to 20% in the population of developed countries, and this figure continues to grow steadily. "According to UN forecasts, by 2025 the number of people older than 60 years old on the planet will reach 1 billion 100 million of people". In the context of the demographic crisis special scientific interest to the late stages of human life appears. This is reflected in the spread of the idea of lifelong learning, the formation of the institute of gerontology education –that is various forms of education designed specifically for the third age.

An important component of e-learning model is the use of media, Internet technology as a means of information and communication. The introduction of distance technologies is required for general availability of gerontology education and expanding educational space.

For the majority of elderly people, life is an intellectual adventure. Knowledge can be accessed via the Internet and the media, as well as via specialized agencies for older students. In the UK, those are “Open universities” and University of the “third age” (U3A), in the United States: education institutions for people of retirement age (Institutes for Learning in Retirement) and boarding houses for retired (Elderhostel), in Germany: Academy for the elderly (Seniorenakademien) and public schools (Volksschulen) (Vyssotskaya, & Mitina, 2010).

Modern demographic crisis is accompanied by a digital break-off between different population groups. We live in the age of information, where information technologies have become an integral part of life, and an essential component of information culture of general human culture. The ability to adapt to rapidly changing innovations declines with age, especially with the retirement and at the same time there is a great loss of a large number of social contacts, however the society needs to human competence increase. Today the use of information technology is a necessary condition for an elderly person to adapt to society, it provides guidance in the information stream, improves the quality of life. In addition, due to the problem of extending professional longevity there is a necessity of advanced professional training of older employees. Hence, a great attention is paid to the development of educational programs in computer literacy for the third age.

There are certain barriers that impede the interaction of elderly people with a computer. These barriers include:

- the reduction of the speed of perception, memory (especially short-term), attention, vision, hearing, motor skills work efficiency;
- stress, especially at the initial stage of training associated with the interaction with the new equipment for the learners, hence the possible feeling of frustration, dissatisfaction with the impossibility of performing the assigned tasks;
- linguistic problems related to the development of new computer terms (Jones & Bayen, 1998);
- sophisticated web design sites, complicates the orientation in the information space of the Internet.

There were experimentally established such positive effects of electronic training for older adults as an extension of self-control, increasing in communication (and as a result, decreasing the feeling of loneliness), self-development, strengthening of the self-esteem and feelings of self-worth, improving the quality of life and increasing general knowledge .

M. Karavidas, N. Lim, S. Katsikas (2005) have shown that older adults with higher level of PC using demonstrate a greater degree of independence from the others and satisfaction with their lives. George S. Ford (2013) showed a reduction of depression and strengthening the psychological well-being during the development of the Internet by elderly people.

#### **4. Conclusion**

Thus, information technology in general represents an alternative form of education that may be missing in the old age. They confront to social isolation of people (that happens at retirement) and give additional features like shopping, leisure activities, training, and participation in virtual communities

via the Internet), help to enjoy the benefits of civilization and adapt to modern society, to keep learning, to keep social activity.

Gerontology education can fill the life of older adults with positive events; offer them opportunities for productive activities, for improving mental and social well-being and self-implementation.

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### **References**

- Burdescu D.D. (2015) E-Learning Tools for a Software Platform. *Proc. of 2nd KES (Knowledge Based Engineering Systems) Conference on Smart Education and E-Learning*, 41, 69-79.
- Ford, G.S. (2013). Revisiting Internet Use and Depression Among the Elderly. *Phoenix Center for Advanced Legal & Economic Public Policy Studies*, 13(2), 1-5.
- Jones, B. D., & Bayen, U. J. (1998). Teaching older adults to use computers: Recommendations based on cognitive aging research. *Educational Gerontology*, 24(7), 675–689.
- Karavidas, M., Lim, N. K., & Katsikas, S. L. (2005). The effects of computers on older adult users. *Computers in Human Behavior*, 21(5), 697–711.
- Novikova, V.S. & Beskrovnaya, L.V. (2015) Smart Edutainment as a Way of Enhancing Student’s Motivation (on the Example of Board Games) *Proc. of 2nd KES (Knowledge Based Engineering Systems) Conference on Smart Education and E-Learning*, 41, 69-79.
- Vyssotskaya, I. V. & Mitina, A. M. (2010) Models and Technologies of Elderly People Education: Analysis of Foreign and Russian Approaches. *Proceedings of Volgograd State Technical University*, 8(9), 118-122. (in Russian)
- Wagner, N., Hassanein K., & Head M. (2010) Computer use by older adults: A multi-disciplinary review. *Computers in Human Behavior*, 26(1), 870–882.