

EdCW 2020**International Scientific and Practical Conference Education in a Changing World: Global
Challenges and National Priorities****ANDRAGOGIC TECHNOLOGIES OF SUPPORTING LIFELONG
EDUCATION OF ADULTS**

Abram Maron (a), Liliia Rezinkina (b)*, Marina Aleksandrova (c)

*Corresponding author

(a) Institute of Education Management of the Russian Academy of Education, Saint Petersburg, Russia,
sofamaron@rambler.ru

(b) Research Institute of the Federal Penitentiary Service of Russia, Moscow, Russia,
Saint Petersburg State University of Industrial Technologies and Design, Saint Petersburg, Russia,
lastik65@yandex.ru,

(c) Yaroslav-the-Wise Novgorod State University, Veliky Novgorod, Russia, Marina.Aleksandrova@novsu.ru

Abstract

The article describes the set of original adult education technologies developed by the authors; it is based on the general theory of andragogic support, patterns of adult personality development, and the features of this process in the information environment. The mechanisms of predicting and tracking the technologies' effectiveness with the help of a level approach to the development of competencies are presented. The design of new technologies for educating adults involves the potential of the information society and digital environments; new professional and socio-cultural activities; use of personal experience and its transformation in regards to new life and professional situations; integrative coordination of new knowledge and skills with already established ideas and beliefs; increasing requirements for social professional competencies and personal mobility; expanding network and distance interaction in an open educational environment. These technologies are based on the subject-activity theory, which is using the basic provisions of the theory of personality development, the concept of activity mediation and the laws of professional and creative self-development.

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1. Introduction

Nowadays, it is necessary to develop a complex of pedagogical technologies that implement the ideas of supporting the professional and personal growth of an adult, taking into account new possibilities of the developing environment (Sherayzina et al., 2020).

Productive learning is considered the leading idea of modernizing the lifelong education of adults (I. Boehm, S. I. Gessen, D. Dewey, S. Frene, B. Schlesinger, I. Schneider and others) (Shekhireva, 2018, p. 21). In Russia, this issue was studied by M. I. Bashmakov, N. B. Krylova, S. N. Pozdnyakov, A. N. Tubelsky, A. V. Khutorsky, S. N. Chistyakov and others (Rezinkina, 2016).

Valuable contribution to the development of the theory of technological support for lifelong education of adults was made by such andragogue scientists as S. G. Vershlovsky, S. I. Zmeev, V. G. Onushkin, E. I. Ogarev, Yu. N. Kuljutkin, M. Knowles, D. Rogers et al. (Maron & Rezinkina, 2017).

Conceptual ideas about the essence and structural characteristics of technologies are based on the following ideas of the system-activity process of adult education:

- a system of certain operations, technical actions, structured by stages and functions of the learning process;
- a set of forms, methods and tools for achieving predicted results;
- an operational learning model based on the concept of activity, which determines the conditions for the implementation of the cognitive activity of a student (Vershlovsky, 2008);
- a number of environment factors that affect the educational process, particularly, the socio-psychological climate within the learning group (Avakyan & Vinogradova, 2019).

However, the analysis of the term ‘adult education technologies’ based on various scientific and methodological approaches shows the necessity to update the work on the development and implementation of new andragogic technologies for adult education, taking into account the digitalization of all spheres of human life.

2. Problem Statement

During the research, the leading idea for considering the problem was identified; it should rely on the following features of the concept ‘andragogic technology of adult education’:

- an andragogic system aimed at creating organizational and pedagogical conditions for the development of an adult as a personality, capable of solving productively practical problems in changing situations and getting a predicted result;
- a system of ways and methods of educational and practical activities of an adult, contributing to a person’s value and personality development, which is based on the design of necessary competencies, qualities of self-development, their assessment and self-esteem (Rezinkina, 2016).

3. Research Questions

Today, the most relevant and effective educational technologies are those aimed at the development of a culture of thinking and intellectual skills, personal qualities of self-organization and self-education, enhancing reflexive mechanisms in educational activities. These are metacognitive technologies (Fejes & Nylander, 2015; Rybakina, 2018; Zavialova & Soldatova, 2019).

This article solves the problem of designing new educational technologies for efficient adult learning in modern conditions.

4. Purpose of the Study

The purpose of the study is to develop and test adult education tools based on the principles of socio-cultural conditioning of technologies, integration coordination, technological and module features, and psychological comfort of education.

5. Research Methods

The methodological basis of the research is the andragogic and integration approaches. The andragogic approach determines the scientific and methodological basis for the design of the adult education system, taking into account the leading concepts, patterns and principles of human learning. The integration approach singles out the most effective tools for designing the educational process based on the integration of new knowledge and the existing life and professional experience of students.

6. Findings

Kondakov (2017) describes innovations that will significantly affect both the development of the adult and the system of lifelong education as a whole. The researcher mentions such innovations as event education, educational storytelling, mass open and boxed learning; bricolage; meta-study, etc. Feldstein describes the strategic resources of modern development of society and education and emphasizes that the most significant changes in society are the changes of the person proper (as cited in Maron & Rezinkina, 2017). Recently, the city educational landscapes with available innovative technologies, especially applied and practice-oriented ones, have acquired a significant role in lifelong adult education (Pichugina, 2019).

We support the ideas of considering adult education technologies as an andragogic system, focused on the vocational and personal development of a professional, and present below our own technologies tested at the Leningrad Institute for the Development of Education (professional development courses).

The technology of integrative coordinating professional and life experience with new knowledge is aimed at motivating and stimulating adults towards self-determination and self-education, development of their analytical and research potential. The technological map includes an algorithm for organizing the activity of an adult student; it includes reflection on personal experience, fundamental supports determination, analysis and correlation of new knowledge with personal experience, its

adjustment and broadening based on integration with the experience of the professional community (Rezinkina, 2016).

The expected result of this technology implementation is the development of the reflective and communicative competence of an adult learner (Sizikova, 2019).

The purpose of the **updating new theoretical knowledge technology** is to eliminate the adult learner's reluctance to acquire new theoretical knowledge. The technology algorithm includes the teacher's clear statement of relevant tasks with their subsequent transferring to practical situations; then the students present results of their activities, followed by group discussion and identification of theoretical problems and questions; after the analysis, a teacher-andragog formulates the theoretical problem of the new level, the proposed project products are adjusted in accordance with the new theoretical knowledge; then new competencies are developed (Rezinkina, 2016).

The effectiveness of this technology is estimated considering the dynamics of the development of the motivational alacrity of an adult learner to acquire new theoretical knowledge.

The informational inclusion technology is mostly aimed at the integration of full-time and distance learning based on joint discussion of the developed projects by the educational process participants, their mutual analysis, adjustment and addition, presentation and sharing with network communities. The step-by-step algorithm of this technology includes a presentation of solving professional problems case by a teacher-andragog; the audience offers their own solutions or additions to this presentation based on their own experience; all together students consider various options highlighting their advantages or disadvantages; then a group takes an optimal decision, there is informational inclusion of adult learners and presentation of a group product (Rezinkina, 2016). Chervonny (2019) believes that personal and professional development is based on a practice-oriented training system, namely, the continuous solution of professionally relevant educational tasks.

The result of this technology is the motivation and activation of educational and project-research activities of adult students, the development of feedback competencies based on information technologies use.

The plan of a lesson "Analysis of a lesson in the context of new Federal State Educational Standard implementation" will serve as an example of practical testing of actualizing new theoretical knowledge technology.

The teacher-andragog asks the students who work as managers of educational organizations to identify the main types of lessons. The students mostly mentioned a lesson-lecture, a lesson for the development of new knowledge, a seminar, a laboratory work, a generalizing knowledge lesson, etc. When asked about the substantiation of such a classification, the students explained it with the applicability in real practice.

- The teacher-andragog formulates of a new problem – to identify a theoretical paradigm which can be used to classify lessons in accordance with the requirements of the Federal State Educational Standard.
- This problem has necessitated the analysis of the traditional knowledge paradigm and the modern personality-oriented paradigm. Discussion of the revealed provisions confirmed that

proposed classification of lessons belong to the traditional knowledge paradigm, where the education subjects concentrate their attention on the informational component of classes, the transmission of information, its transformation, consolidation and control. During the group debate, it was found out with the help of a teacher that the modern personality development paradigm is focused on the personality, the development of personal qualities, abilities, alacrity, and key competencies.(Gafurov et al., 2019). Therefore, another, up-to-date, classification of lessons is being developed: a lesson in problematizing, a lesson-communication, a motivational lesson, a lesson-immersion in new knowledge, a lesson on research in the course of educational practices, a lesson of self-esteem development, a reflection lesson, etc. (Rezinkina, 2016).

A prominent place in the system of andragogic technologies implementation is occupied by non-formal education, in particular, self-educational activities of adults. As an example, we will describe the technology of self-design and implementation of an individual educational route (hereinafter IER) of a teacher. The technology development is based on the experience of Ovchinnikova (2018) (Novokuznetsk), who described the following step-by-step algorithm for the technology implementation.

Step1. Diagnostics and identification of professional interests, difficulties of the teacher, characteristics and types of professional activity

Step 2.Designing an individual route for a teacher in self-educational activities (development of a route map, specific actions for the implementation of professional development tasks, design of one's own achievements and results).

Step 3.Determining the organizational and pedagogical conditions for the implementation of IER (study of the work experience of best teachers, analysis of Internet resources, consulting methodologists, participation in experimental innovation activities, in the activities of problem-solving creative groups). At this stage, the methodological service, teachers-mentors, consulting andragogs play crucial role in providing support for teachers.

Step 4. Self-diagnosis, self-correction are based on professional reflection, assessment of achievements. Experts-andragogs, heads of educational organizations, methodologists, and fellow teachers are involved. Corporate activities in the form of methodological association and network interaction are implemented.

In the system of corporate training, it is necessary to provide comprehensive support for the activities of adults aimed at enhancing their professional skills. An example is the technology "Training Company", when a real production facility, project or system is modeled, the conditions of functioning are considered. In this case, the consulting support of this process is carried out from two positions – from the side of the educational organization and the personnel-methodological services of the company.

7. Conclusion

In the process of using educational technologies for adult education and support, self-assessment of students revealed the following results: acquired skills of solving new professional tasks efficiently (72% of respondents); increased motivation for using innovative practices (66%); development of

analytical thinking (58%); skills of completed projects self-assessment (66%); development of analytical and critical thinking (56%).

Thus, the developed and implemented system of original technologies based on andragogic design allows creating conditions to support the self-realization of an adult as a personality and as a subject of activity; to develop personal analytical and reflexive abilities; to bring an adult into a meta-position in relation to personal and professional experience; to understand the meaning of one's professional growth; to enter large-scale social and professional relationships; to form alacrity and motivation for independent acquisition of new knowledge.

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