ANDRAGOGIC CONCEPT AND TOOL OF LEARNING
AND EDUCATION OF ADULTS

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One of the aspects that are increasingly imposed in the context of developing systems of formal, non-formal, informal learning and education of adults is the adequating of didactic actions to their individual, professional and social needs. Achieving this goal requires, among other things, the adoption and application of training, creative and interactive andragogic technologies and strategies.

The premise from which it was started implies the delimitation and explanation of the key notions of adult learning and education: methodology, technology, strategy, method of learning and education of adults. The focus is on arguing the essence of these notions from the perspective of traditional paradigm and modern paradigm of training and education. In the given article, an andragogic concept of connection and interpenetration of the methodology, technology and strategy of adult learning and education is proposed. Examples of the design and application of didactic approaches to learning and educating of adults are also proposed.

Keywords: andragogy, andragogic methodology, andragogic strategy, andragogic method, adult didactics.

CONCEPTUL ȘI INSTRUMENTUL ANDRAGOGIC DE ÎNVĂȚARE ȘI EDUCAȚIE A ADULTILOR

Unul din aspectele care se impun tot mai insistență în contextul dezvoltării sistemelor de învățare și educație formală, nonformală, informală a adulților este adecvarea acțiunilor didactice la nevoile individuale, profesionale și sociale a acestora. Atingerea acestui deziderat presupune, printre altele, adoptarea și aplicarea unor tehnologii și strategii andragogice formative, creative și interactive.

Premisa de la care s-a pornit presupune delimitarea și explicarea noțiunilor-cheie ale învățării și educației adulților: metodologia, tehnologia, strategia, metoda de învățare și educație a adulților. Accentul se pune pe argumentarea esenței acestor noțiuni din perspectiva paradigmii tradiționale și paradigmii moderne de instruire și educație. În articolul dat se propune un concept andragogic de conexiune și interpătrundere a metodologiei, tehnologiei și strategiei de învățare și educație a adulților. Sunt propuse și exemple de proiectare și aplicare a demersurilor didactice de învățare și educație a adulților.

Cuvinte-cheie: andragogie, metodologia andragogică, strategia andragogică, metoda andragogică, didactica adulților.

Introduction

In the last 2-3 years, the spectacular changes in society, generated by various crises, have become subjects of debate, analysis and forecasts. Against this background, a veritable “explosion” of approaches, technologies, information regarding education in general and adult education in particular, can be identified. In fact, this state of work is characterized as a postmodern one, but also the one of uncertainties and that generates the reconstruction of adult education systems from the perspective of the contemporary world challenges. This is confirmed by the latest educational policies promoted by various international structures: UNESCO, the Council of Europe, the UNDP, etc. At the same time, the directions for development of adult education (sub)systems remain prioritized:
- the further valorization of the concept of lifelong education;
- the further valorization of the humanistic paradigm of adult education, which is oriented towards the maximum development of the own self, personality and own experiences;
- the establishment of new socio-humanist relationships based on: harmony with nature, cooperation and negotiation, equal opportunities, etc.;
- the promotion of peace culture and development of competences for sustainability.
Within the learning and education of adults, this direction has certain specifications and extensions:
- diversification of the adult learning and education forms;
- ensuring the learning and education of adults in relation to their own needs, but also the needs of labor market;
- more active promotion of non-formal and informal education of adults;
- ensuring the quality of adult learning and education by updating didactic and methodological approaches specific to andragogy.

In the current conditions, the adult learning and education process can be called effective when:
- each adult realizes his/her own potential in relation to his/her own opportunities and experiences;
- optimal results are obtained through individual efforts, but also through those of collaboration with others;
- each adult realizes his/her own learning interests and needs in different contexts and through different forms and methods;
- every adult displays creativity, critical spirit and activism;
- each adult is responsible for the learning outcomes and their application in their own activity.

The andragogic framework of adult learning and education

The andragogic framework of adult learning and education includes, along with outcomes, contents, means, and a didactic system: the methodology of adult learning and education (andragogic methodology); adult learning and education technology (andragogic technology); adult learning and education strategy (andragogic strategy); the method of adult learning and educating (andragogical method) (Technologies, strategies, general didactic methods adapted and applied in the process of adult learning and education take on andragogic functions). The characterization and delimitation of these notions can be established in the context of traditional and modern paradigms of adult learning and education (Figure 1).

Fig. 1. Traditional and Modern Approaches to Learning and Education of Adults.
Within these approaches, andragogic technologies, andragogic strategies and andragogic methods as subsystems/categories of the adult training process are interpreted as constitutive constructions/approaches in relation to the following:
- their specific characteristics and meanings (structure, functions, orientations);
- modern paradigms of adult learning and education;
- their formative and informative valences.

In educational theory and practice, including that of adult learning and education, we encounter a great diversity of approaches and definitions of these notions with the most unexpected meanings:
- andragogic technologies and strategies are seen as synonyms;
- andragogic strategies are part of the structure of andragogic technologies, and vice versa;
- andragogic technologies are equivalent to andragogic methodologies, and vice versa;
- andragogic strategies can be equated with andragogic methods [2, p. 371].

The analysis of different views on the notion of andragogic technologies allows us to deduce at least three approaches to substantiating a systemic theory of didactic technologies, including andragogic ones.

The first approach - chronological (V. Bespalco [3], C. Cucoș [4], Gh. Vaideanu [5], D. Spitter, S. Gibson and others), theory that was formed during the education period centered on its deterministic understanding, the object of education being considered highly algorithmized. Currently, when andragogy focuses on the concept of education centered on the learner and the diversity of educational actions, this approach is no longer current.

The second approach (G. Selevco, M. Meyer and others) defines the notion of technology too broadly, what totally excludes the training content; any andragogic experience can be placed in the „technology” dimension. At the same time, the principle of transfer, unity and reproduction of andragogic technologies in different learning contexts is not respected.

The most argued theory of andragogic technologies focuses on the systemic approach and the coherence between the didactic and technological dimensions.

Thus, within the modern training paradigm the „andragogic technology” is viewed more broadly than „andragogic methodology” and expresses a conceptual view of the process and outcomes of adult learning and education. For example, problematized andragogic, heuristic, investigative, algorithmic, etc. technologies. At the same time, within the traditional training paradigm, „andragogical technology” is subordinated to „andragogical methodology” (adult didactics) on the procedural dimension.

Traditionally, it is considered that the object of methodology is the methodical/methodological training system, which includes goals, objectives, content, methods, forms and means of organizing the educational process.

As a rule, the methodology/methodics simultaneously answers three questions: Why do we learn? What do we learn? How do we learn? In this context, technology starts when the objectives are determined and it is required to design the procedures to reach them.

From this perspective, we can state that in the pedagogy of adults, the notion of „andragogic methodology” is applied in two senses: in the narrow sense, the methodology represents the set of methods and procedures used in the process of adult learning and education; in the broad sense - as a science about the legalities of learning and education of adults. In the first case, andragogic methodology is viewed more narrowly than andragogic technology; in the second case, methodology has a broader meaning than andragogic technology.

In the last case, one of the objectives of andragogic methodology is identifying the indicators of andragogic technologies applicability. Technologies are designed depending on certain conditions with the orientation to the established result, and not to the assumed one. The notion of andragogic technology as part of adult pedagogy is close to „adult didactics”, which aims at the foundation of learning theory, the elaboration and application of forms, methods and procedures for training the learners’ competences. Adult didactics operates with what is common/general for particular didactics/methodics. Technology can be seen as applied didactics. Didactics is not the general technology of learning: the objective of technology is to transform didactic laws and principles into didactic strategies [2, p. 376-377].
J. Parent and Ch. Nero understand by strategy „a set of resources and methods planned and organized by the teacher in order to allow the learner to achieve the given objectives. The people, the locations, the materials and the equipment form the resources, while the modes of intervention (approach), the pedagogical forms and the pedagogical techniques” [6, p. 55].

Similarly, by strategy is understood: „a set of forms, methods, technical means and principles of their use, with the help of which the contents are circulated in order to achieve the objectives” [7, p. 9]; „the combination and chronological organization of the set of methods and materials chosen to achieve certain objectives” [8, p. 70]; „the set of means put to work to achieve the set goal, starting from the organization of matter and the choice of supports to the determination of learning task and the conditions of achievement. All this will depend on the objectives proposed to be achieved and on the training phases experienced by the subject” [9, p. 38]; „the specific, opportune, conjunctural combination of methods, means, forms of organization, material and temporal resources, types of learning” [10, p. 16].

The analysis of different approaches and definitions of „didactic strategies”, including andragogic ones, finds that the methods are their core/basic component. In education sciences, the method refers to the path to be followed, the path that leads to the achievement of educational objectives. The method has a multifunctional character, in the sense that it can be applied as an independent didactic tool, but also in combination with other methods, building a didactic/andragogic strategy.

At the same time, it can simultaneously or successively participate in the achievement of one or more adult learning and education objectives.

The method is applied through a set of certain operations, called procedures. „The didactic procedure represents a sequence of method, a simple detail, a more limited action technique, a component or even a particularization of method” [4, p. 286-287].

The interpretation of „androgogic methodology”, „androgogic technology”, „androgogic strategy”, „androgogic method” concepts allowed us to deduce their place and reports/connections in the educational paradigm of adults.

In the traditional paradigm, „andragogical strategy” is subordinated to andragogical technologies and andragogical methodology (in the broadest sense of the word). Schematically, this subordination can be presented as follows (Figure 2):

**Fig. 2. Andragogic Technologies versus Andragogic Strategies and Methods.**

In the modern paradigm, andragogic strategies represent a constituent subordinate to andragogical technologies and education policies of adults, in the given case the ones of adult education (Figure 3).
Fig. 3. Andragogic Strategy in Structure of Modern Adult Education Paradigm [11, p. 19].

Therefore, the methodology of general andragogy/competence training consists of a set of technologies aimed at achieving the objectives. At the same time, a “methodology” can be equivalent to an andragogic technology.

Andragogic technology, in turn, consists of a set of andragogic strategies that are oriented towards achieving specific objectives/competence training. At the same time, an andragogic technology can be equivalent to an andragogic strategy in a completed context.

The andragogic strategy consists of a combined set of interacting methods. As a rule, within a strategy, the methods can be rearranged, depending on the external demands and certain contexts, which means that one and the same method can acquire the features and dimensions of an andragogic strategy. The andragogic strategies are oriented towards the achievement of specific objectives/ training of competence units. It should be noted that several objectives can be achieved through a strategy, but only one objective can be achieved.

Andragogic methods consist of a set of procedures and are oriented towards achieving operational objectives. As in the case of andragogic strategies, some methods can acquire the features of a procedure in the context of another method and, conversely, a procedure can take over the function of a method.

The approach to adult learning and education from the perspective of valorizing the andragogic framework opens several opportunities for efficient organization of this process, one of them relates to the design and application of andragogic strategies focused on the dominant method and the complementary ones, determined by the format competences within an andragogic strategy.

Here is presented a methodological innovation The Model of Combining Methods in Relation to Andragogic Technologies and Strategies (Table 1).

Table 1. Models of Andragogic Strategies Within Andragogic Technology in Relation to Their Structure.

<table>
<thead>
<tr>
<th>Andragogic Strategy Scheme</th>
<th>Andragogic Technology</th>
<th>Andragogic Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expository/Illustrative-Explanatory</td>
<td>Demonstrative-Illustrative Exemplification</td>
<td></td>
</tr>
<tr>
<td>Algorithmized</td>
<td>Programming Exercising-Demonstration</td>
<td></td>
</tr>
<tr>
<td>Heuristic</td>
<td>Exploration Discovery Conversation</td>
<td></td>
</tr>
<tr>
<td>Problematized</td>
<td>Problematized Research</td>
<td></td>
</tr>
<tr>
<td>Investigative/Researching</td>
<td>Learning Through Discovery Case Study</td>
<td></td>
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</table>
Variant 1

The methods within this structure are applied consecutively: intermediate tasks are proposed by the trainer. Complementary/intermediate methods and modalities of realization are applied to achieve the objectives more efficiently. As a rule, this strategy is characterized as expository.

Variant 2

The methods in the structure of this strategy are applied consecutively, without the application of intermediate complementary methods/procedures. As a rule, these strategies have an algorithmized, forecasted character.

Variant 3

The methods are applied consecutively with the application of intermediate procedures, but the trainees are not given clear modalities to achieve the objectives. They have to look for many heuristic procedures to solve the problem. This variant corresponds to heuristic strategies.

Variant 4

In this case the adult is not offered intermediate methods/procedures. He/she is put in a problem situation, going to outline his/her own ways of solving it. In the given case, we refer to the problematic strategies.

Variant 5

In this case, the initial conditions are not given to adults. They model their own goals and the ways to achieve them, analyze the results and compare with the initial intentions. This variant can be called an investigative/research strategy.

The name of strategies in the context of variants described is determined, first of all, by the type of objectives to be achieved and the type of methods applied/combined within the andragogic strategy. At the same time, the complementary methods and types of activities create conditions for the applied methods to constitute a certain andragogic strategy (Figure 4).

The design of interactive andragogic strategies in relation to the typology of objectives/competences is based on the correlation between the substance of competences/units of competences and the type of activity/action and the action potential of methods combined within the andragogic strategies.

Express-study of preferences regarding the use of strategies and methods of learning and education of adults

The purpose of study was to determine the options and preferences of trainers and adult trainees with reference to didactic (andragogic) strategies and methods applied in the process of adult learning and education.
In this regard, 18 trainers and 62 adult trainees (teachers), participants in the lifelong training courses, were questioned. The respondents were asked (separately) the following questions:

- Name the didactic strategies you know.
- Name the didactic methods you know.
- From the list of didactic strategies, choose the most efficient and attractive ones or those that you have applied/apply in practice (for trainers).
- From the list of didactic methods, choose the most efficient and attractive ones or those that you have applied/apply in practice (for trainers).

To the first two questions we obtained the following answers:
- 35% of trainers and 15% of adult trainees (teachers) named 2-3 didactic strategies, mainly expository ones (demonstration, explanation, etc.), but also the investigative ones (case study, projects);
- 60% of trainers and 45% of adult trainees (teachers) listed no less than 10 methods, starting with the expository ones and ending with the heuristic ones.

Most of the respondents included in the list of answers as didactic strategies and methods, forms of learning, such as: teamwork, training, seminar, etc.

It should be noted that neither the trainers, for the most part, nor the adult trainees (teachers) have a clear vision of the notions of „didactic strategy”, „didactic method” and do not correlate didactic methods and strategies in an training act. For example, the solving problem situations method is part of problem-based learning strategies or the discovery method is part of heuristic didactic strategies.

The results of respondents to the third question regarding the attractiveness and preferences of didactic strategies are shown in Table 2.

**Table 2. Andragogic Technologies/Strategies Requested by Trainers and Adult Trainees.**

<table>
<thead>
<tr>
<th>No. crt.</th>
<th>Andragogic Technologies/Strategies</th>
<th>Trainers, %</th>
<th>Trainees, %</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Expository: exemplification; demonstration; explanation; illustration; exposure</td>
<td>60</td>
<td>75</td>
</tr>
<tr>
<td>2.</td>
<td>Algorithmization: programming; modeling; demonstration; training</td>
<td>80</td>
<td>70</td>
</tr>
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</table>
In the case when taxonomies of didactic strategies and methods were also presented to trainers and adult trainees (teachers), they oriented themselves more adequately in formulating their answers. The trainers, mostly (90%) requested heuristic didactic strategies (explanation, discovery, heuristic conversation, etc.), problematized didactic strategies (solving problem situations) and investigative strategies (case study, projects, etc.) and less requested expository didactic strategies (exposition, illustration, etc.). Adult trainees preferred expository didactic strategies more (75%) and investigative ones less (60%).

The explanation, in this sense, is related to the dominance of reproductive education in the past and the lack of motivation for active learning of some trainers.

The investigated respondents were asked to express their opinion regarding the methods used in adult education (the fourth question) as shown in the data below:
- 70% (trainers) and 80% (trainees) indicate dialogue and free discussions;
- 90% (trainers) and 75% (trainees) mention the debates: brainstorming, Philips 66;
- 40% (trainers) and 70% (trainees) opt for the presentation/lecture;
- 90% (trainers) and 90% (trainees) indicate case study, role play, Cube, Gallery Tour;
- 65% (trainers) and 30% (trainees) are for preparing reports.

It should be noted that the choice of didactic methods by trainers and adult trainees (teachers) was not connected with one or another didactic strategy or a specific criterion according to which the didactic methods are classified. The choice was related to the knowledge of a certain method or the practical experience of applying that method in their own educational practice.

The not-knowing and not-respecting of interconnections between didactic (andragogic) strategies - methods by the trainers becomes a significant impediment in the gradual training/development of competences expected in the adult learners.

The conclusion drawn from the results of the respondents’ survey is the interest of more than half of these respondents towards interactive strategies and methods, with the exception of report preparation method. The very high weight of the options for method of dialogue, brainstorming, case study, solving problem situations, which allow the active involvement of the trainer and the trainee in the act of andragogic knowledge, is evidenced.

**Conclusions**

Andragogic technologies and strategies represent a way of approaching learning and education of adults, determined by educational philosophy and policies. Andragogic technologies and strategies summarize two options: one – for a certain way of approaching learning (problematized, algorithmized, heuristic); second – for a certain way of selecting and combining methods within some forms of organization of adult learning and education.

The promotion and development of the concept of andragogic technologies and strategies is motivated, first of all, by the need to streamline the process of formal and non-formal learning and education of adults, and also to develop adult pedagogy as educational theory and practice.

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