

# ACTIVE LEARNING IN ADULT EDUCATION. AN EPISTEMOLOGICAL AND PRAXEOLOGICAL APPROACH

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## *Abstract*

Based on the theories of the constructivist paradigm, whose supporters believe that the socio-cognitive conflict plays the leading role in the access to knowledge, the contents of the paper highlights the need of conducting an active experiential learning in adult education process. The capitalization of life and learning experience represents a source of knowledge, but it can also constitute, a real epistemological obstacle, whose surmounting calls for deconstruction, reconstruction. The change of the main interest from “how much one learns” to “how does one learn”, and to the responsibility of the journey one has made, can ultimately lead to self learning, self training. The way and the aim coexist. The quality of the product depends on the way the whole process is organized. Adult learning performance is determined by complying with a set of laws, without which the access to finality is just a utopia.

*Keyconcepts:* norms in adult education, active learning, experiential learning, socio-constructivist paradigm

## **Characteristics of Active Learning from the Point of View of the Constructivist Paradigm. The Model of Triangle Teaching according to Jean Houssaye and Yves Bertrand**

Referring to theoretical and action issues, supporting the need for adult education, from the point of view of the principles of the socio-constructivist paradigm, the present paper underlines the role of access to knowledge through active learning activities, enabling conscious discoveries, interpretations, reconstructions. By moving the focus from how much to learn on how to learn, the responsibility of the mileage finally determines self-learning, self-study. Thus, target and path coexist. The way the whole process is organized determines the quality of the product.

Describing the characteristics of teaching, Houssaye and Bertrand propose to address to the following components, which are interrelated, essential to any learning process: *the educated, knowledge, teacher* (Houssaye), *the educated, knowledge, society, other people, outside world, the universe* (Bertrand).

Houssaye believes that there is always a connection among the educated, knowledge, teacher. But, a privileged relation exists only between two of

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these elements. The third is inferior, it becomes known more by its absence than by reciprocity, but without it, there is no relation. Its role is defined and it comes to the fore through the others, the real subjects, being third persons.

Therefore, to the process of teaching corresponds the axis teacher-knowledge. The educated is the third included part, having a passive role. The intellectualist paradigm in education fosters this relationship. Socrates, Herbart, Erasmus, Comenius develop the idea that the role of the content in the educational approach is a priority.

Training favours the axis teacher – the educated, now knowledge is the included third part. The formativist paradigm that corresponds to this axis is represented by Montaigne, Locke, Spencer who consider that education does not limit itself to transmitting information, what is important is the formative relationship.

Learning favours the axis the educated-knowledge, now the teacher is the third included part. The constructivist paradigm corresponds to this concept, making possible „a balance of extremes – intellectualism and formativism” (Momanu, 2002, p.40).

The constructivist paradigm thus imposes a change of perspective, a *reframing* of the pedagogical point of view from ontological to epistemological, from reproductive theory to the constructive one, from “socio-technological concepts to autonomous models, from a monistic to a pluralistic understanding of science” [Siebert, 2001, p. 44]. What is essential is the identification and the proper use of methods and means to promote the direct access of the educated to knowledge.

Reece and Walker established how learning methods contribute to achieving certain types of aims, depending on the psycho-behavioural field of membership [2004, p. 106]:

Method	The Psycho-behavioural Field		
	Cognitive	Affective	Psychomotor
Presentation (explanation)	✓		
Demonstration	✓		✓
Talks, debates	✓	✓	
The Method of Projects	✓	✓	✓
Practical Works	✓	✓	✓
Brainstorming	✓		

Role Play	✓	✓	
Simulation	✓	✓	✓
Case Study	✓		
Independent Work	✓		✓
Team work	✓	✓	✓

Therefore, it is efficient the use of strategies which determine active learning, making the connection to a familiar problem for the person who learns, thus enhancing the formation of new competence. Learning is not a mechanical process of accumulation of knowledge, quantitatively measurable, which follows the principle *The more, the better*, but it represents a process determinat by the allocation of meaning. According to the followers of the constructivist paradigm, there is no only correct solution in the act of learning, but there are many possible temporary solutions. Learning is always open to new possibilities, new alternatives to the same extend that teaching is not a linear process, transmitter-receiver, but a "circular recursive perspectivist interaction, during whose function, assumptions occur and they are more or less justified, selective perceptions, reductionist schemes" [Siebert, 2001, p. 14].

One of the most useful descriptions of the adult involved in learning belongs to the American theoretician John Dollard, who claims that the person who learns is one who wants, does and gains something. The fact that all these verbs are active underlines the idea of the supporters of the constructivist paradigm, according to which learning is, above all, a dynamic process which generates conversion. Reorganization, restructuring always occur: "it is not difficult to add new pieces of knowledge, but to reorganize what you have learned" [Kidd, 1981, p.13]. This reorganization coincides with the appearance of a conflict state, which becomes the source of learning and the key element of building knowledge. Thus, the problem is not to acquire an experimental culture, but "to remove the obstacles already met in everyday life" [Bachelard, 1949, p. 37].

### **Principles of a Formative Approach for Adults**

The teaching principles coming from the constructivist mentality have the potential to support and stimulate active learning processes, autonomous and situational.

Roger Mucchielli identified a series of rules which are to be respected while creating a teaching approach for adults: *An adult can learn better if:*

*one is oriented even from the beginning of learning towards a clear purpose, one takes part and is responsible for all the steps of his own learning, one is integrated in a learning group, one's life experience is valued.* These principles will be explained in detail, being supported by relevant theories which will justify the necessity of respecting teaching rules according to Mucchielli.

*An adult can learn better if: one is oriented even from the beginning of learning towards a clear purpose.*

It has been proved that the possibility of knowing the result of study has a positive effect on performance. Learning takes place only when the adult understands that his needs can be satisfied only by specific ways of action. In learning activities where the adults have been informed from the start about the expected results, significant progress was made, proving the fact that efficiency is connected to the person becoming aware of the purpose of the activity which has in view a specific situation, a well-defined behaviour. Moreover, when the adult's need for learning is linked to fulfilling that person's needs, no matter the level attained, performance in learning is guaranteed. Probably at this level we can speak about the theory of extatic education of George Leonard. Satisfying the need for knowledge determines actions which lead to voluntary, unconditioned learning.

*The adult learns better if one takes part and is responsible for all the steps of his own learning.*

In the V<sup>th</sup> century B.C., the Chinese philosopher Lao-Tse defined in simple words the essence of experiential learning: *If you explain it to me, I will listen, if you show it to me, I will understand, but if you let me experience it, then I will learn.*

A great amount of learning at an adult age is connected to the changes of tasks or roles that a person has to fulfill. Changes in evolution are numerous: "the adult becomes independent, identifying and preserving livelihoods, then one chooses a life partner, one becomes a parent and acts accordingly, one interacts with community and society, one enlarges one's duties as a citizen, one obtains satisfaction in old age" [Kidd, 1981, p. 15]. Each kind of change in the economic or social status requires learning.

The use of strategies, of teaching methods that determine a larger number of activities in order to be involved, to participate, to make the adult responsible for discovery and validation knowledge will be essential prerequisites that will promote active learning.

The process of active learning has been defined as the activity which favours real opportunities for getting involved, self-expression and active listening. According to Meyers and Jones, the structure of an experience of active learning supposes the existence of three intertwined categories: elements, resources and strategies. The elements refer to the learning process which takes place effectively, based on dialogue, active listening, reading activities, writing, reflection. The resources imply the technology used while

teaching, educational programs etc. The strategies represent those methods, procedures, ways of organizing that favour active learning: getting the adults organized in learning groups, case studies, simulations, problem solving, role play. During a process of active learning, “adults must discuss while and about learning, they must be given the opportunity to write about what they have learned, they should be capable to narrate previous experience, to apply the learned things in everyday life” [Meyers, Jones, 1993, p.21].

What is valuable is not the accumulation of knowledge, but *how, when* and *what* becomes updated, when it must be so. Education could become “an *autopoietic* system, meaning a self-regulating spring for cultivating individual schemes of thought or of conduct, which proved to be efficient and led to greater autonomy” [Cucoş, 2002, p. 41].

Moving the focus from *how much is* learned to *how it is* learned, the responsibility of *the road* map determines self-instruction, self-study. It is preferable a logic of becoming to one of being. The priority of eternal truths are the movements of active, reversible search. “No human being, no group will be judged according to an established result, but taking into account the purpose” [Dewey, 1948, p. 220].

*An adult learns better if one is integrated in a learning grup.*

The followers of the personalist current considered necessary learning achieved through continuous reporting to the other, the quality of the relationship between the participants provides the quality of the entire process. By including the adult in a learning group, it is created a real opportunity of socializing, of exercising the habit of taking part to one’s self-teaching through cooperation while making a progress.

Alan M. Thomas makes the distinction between the role as a *member* of a learning group and that of a *student* [apud Kidd, 1981, p. 46]. The main characteristic of the role as a student is the fact that one is completely dependent on the authority of the educational systems of knowledge, on the competence of the teacher. The role as a member is the one when adults create a group of any size, in order to achieve a formative common goal. On one hand, being part of a learning group, the adult is not dependent on the authority of the teacher. The need to learn is a normal consequence of action and it is considered its component part. On the other hand, it is known the desire for satisfying these opposite needs – dependence and independence. To a certain extent, the adult feels the need to lean on authority, to have strict tasks, to have a submissive behaviour that would lead to taking responsibility, but in the same time, one wants to dominate, in order for the others to recognize that he/she is *someone*. Sometimes, one of these needs is stronger, sometimes the other, “but they are both present” [Kidd, 1981, p.135]. We are facing the paradox identified by Bertrand, which underlines the need for establishing a balance between the non-directive education of Rogers and the directive one, based on learning through imitation.

In adult education, the participants do not learn exclusively from the teacher, they do not react only at an *informational* input, but they themselves influence the behaviour, the atmosphere, the mood of the person who teaches. A training session is "an enactment in which each person plays a role, in which the participants learn more from each other than from the director" [Siebert, 2001, p. 31]. Access to different sources of information makes the teacher not have the most important role in the dissemination stage, being needed in the process of decryption, of interpretation.

*The adult learns better if his life experience is valued.*

Starting with adulthood, previous experience is a source of enlarging knowledge. Individuality introduces personal notes in the educational evolution. This is the reason why new knowledge should be connected all the time to previous experience. Learning supposes the existence of *previous processes*, knowledge is based on the existent cognitive structures, while experiences relate to other experiences. „Every person does not come only with what one knows to do and has pieces of information about, but one also brings beliefs, one's personal system of representation of the world (...), influences, daily news that reminds us we are not the same, not for one moment" [Șoitu, 1997, p. 115]. Recording basic predictions about future contributions to education, the teachers of adults will create new opportunities which will allow exploitation of experience of life and learning for each participant.

One should consider all noticeable aspects, connected to experience, to adulthood. First of all, it is necessary to exploit the experience of life and learning of an adult while training that person, on the other hand, the role of access to knowledge through *experiential learning* should not be neglected. Learning and action lead to specific solid accumulation. Thus, learning becomes a part of life until finally, the borderline between life and learning disappears. In a nutshell, life itself becomes "a permanent learning experience" [Lindeman, 1945, p. 63].

Kolb brings one of the most useful descriptive models, which can be applied to adults, based on experiential learning. He mentions four intertwined steps, each stage has an approach, which is specific for the person involved in learning: true experience is connected to the active style (*feeling*), reflexive observation is related to reflexive style (*watching*), abstract conceptualization – theoretic style (*thinking*), active experimentation- pragmatic style (*doing*) [Kolb, 2002, p. 67]. The task of the teacher is to create those opportunities for individual expression which will foster learning according to the specificity of each participant.

### **Practical considerations**

In 2006, I carried out a survey on 200 adults, from the countryside and the urban area, they were in two different centres for continuous training.

The purpose of my research was the identification of the role of active learning in increasing adult learning performance.

While choosing the research people, I tried to balance the experimental group with the one of control, by using the technique of parallel groups. Therefore, two groups of medium, comparable capacity were identified.

#### *General hypothesis*

Adults have better results if teaching is made by using active-participatory methods compared to the situation when access to knowledge is facilitated through expository, responsive methods.

#### *Specific Hypothesis 1*

While initially testing the persons in the two groups (the control group and the experimental group), they had similar results.

#### *Specific Hypothesis 2*

Experimental group subjects, who learn by active methods, get superior results at the final evaluation compared to the control group learning by expository methods.

#### *Specific Hypothesis 3*

The performance obtained at the final evaluation is superior to the one from the initial evaluation both on the entire research members and on the analyzed groups.

#### Research variables

- a. Independent variable: learning methods used
- b. Dependent variable: the performance of the subjects

Based on interpreting these results, the two research groups were formed: the experimental group in which active methods were used to transmit new knowledge and the control group, in which expository, responsive methods were involved.

#### Tools used

The subjects' performance was measured through the assessment marks obtained by a test conducted on the basis of a docimology test with semi-objective items, short answer time, a test given both at the beginning and at the end of the training activity.

The analysis and interpretation of results was made by the use of the specialized program for psychological statistics SPSS 10.0 for Windows. The following statistical analysis were carried out:

(a) Test t of significance of the difference between the averages on independent samples, comparing the averages to the variable performance obtained in the initial test, according to the group variable (experimental group – control group);

(b) Test t of significance of the difference between the averages on independent samples, comparing the averages to the variable performance obtained in the final test, according to the variable methods used;

(c) Test t of significance of the difference between the averages on dependent samples, comparing the averages to the two tests (initial and final

evaluation) on the research lot and for each of the two groups (experimental group and control group).

The grades of the adults who learned using active methods are significantly higher than those obtained by the adults who used expository methods. By comparing the graphics of the two stages of evaluation of the two groups, the results are the following:

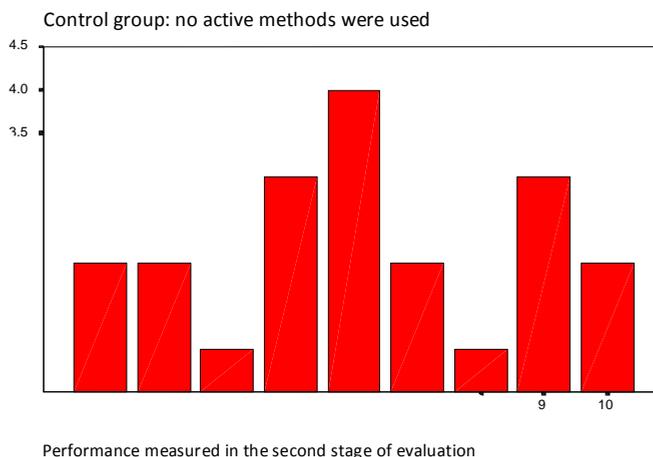


Figure1: *Performance measured in the final evaluation, control group*

In the case of control group (Figure 1), consisting of adults who learned using expository methods, the distribution of the results is of *the Gaussian type*, the curve is like a bell, with a maximum density of frequency in the middle and with minimum density symmetrically placed in the extremities; most subjects obtained grades of 5, 6 and 7, the very small and very high grades were given to a reduced number of subjects.

In the case of the experimental group (Figure 2) containing adults who learned using active methods, most subjects obtained marks higher than 7. A small percentage obtained grades under 7, the results distribution curve is inclined towards the right side of the scoring scale, evolving towards a *J-shaped curve*.

#### *Interpretations*

It has been proved that adults obtain performance in learning, if the following principles are respected during the entire educational process:

- making the most of knowledge experience, valuing it in order to discover new content knowledge (the method of learning groups);
- permanently offering the chance to exercise social roles by establishing multiple interactions with peers (the method of study groups, role play, debate);

- immediate application of new information, knowledge in specific activities (training conducted on real life situations, case study);
- collate acquired information (the method of graphic organizer, debate).

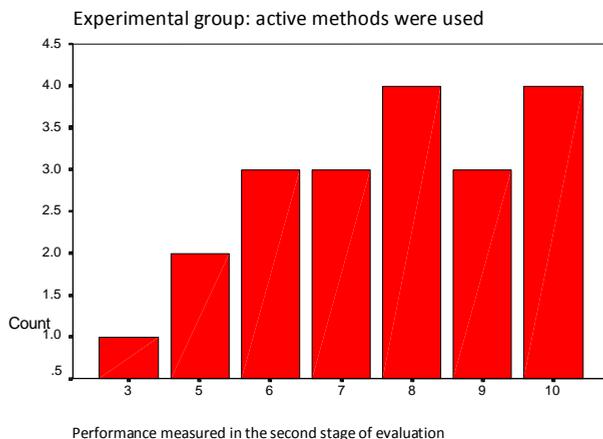


Figure 2: *Performance measured in the final stage of evaluation, experimental group*

## Conclusions

Even if in real life, in classical, authoritarian or intellectualist methods, there is an activity (an intellectual activity of attention and comprehension) and a motivation (the direct or indirect purpose of learning), in theory and practice, we make the distinction between learning using responsive methods and active methods – participatory, thus separating learning based on conditioning, memorizing, repetition and learning based on exploratory experiments, on developing personal response, on discovery and action. Active-participative strategies involve all situations in which the educated people are not training objects, they become active subjects, taking part in the experiment.

Waiving expository methods of transmitting content is not the purpose of the present paper. The autonomous and responsible character of learning does not exclude traditional ways of teaching and learning. In *The Encyclopedia of Psychology*, from 2006, it was claimed that: “traditional methods and principles of teaching can be profitable if not applied exclusively”.

One cannot argue for the exclusive choice of a specific type of method, based on efficiency previously tried or validated by the others. Continuous reporting of the entire approach and of the used strategies to the learning

objectives in the particular context in which the educational process takes place, is prerequisite for achieving efficient and effective learning.

Our environment of life is a living world which is interpreted and built. Educational practice encourages construction, reconstruction and deconstruction, in the same time being in favour of reflexive learning through which people become aware of the possibility of constructing their world. The use of strategies refers to conditions which favour social and professional autonomy for the adult, stimulating teaching and learning as processes involving educational learners who solve and discover problems, interact and influence, due to their own experience, the final stage of knowledge.

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