

A model of autonomous learning

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1. Didactic models. The history of pedagogy permanently registers an aspiration for designing a didactic model, capable of offering proper solutions for an efficient learning. The theoreticians of the educational phenomenon usually outline in a pragmatic manner the ideas extracted from the organization of didactic experiments or epistemologic speculations.

The bound between theoretical (abstract) explanations and the practice of school learning is mediated by the design of a model, seen as the reproduction “in an essential manner of the characteristics of the original system that mediate the knowledge of its properties”[1] or “a simplified construction of reality”[2]. *The didactic model* represents “*a scientific conception used both by the teacher and the researcher aiming at constructing an epistemological educational structure in relationship with the processes of teaching and learning*” (Jimenez, Gonzales și Ferreres, 1989)[3]. Our theoretical and experimental research tries to design a didactic model capable of determining in an efficient manner the stimulation of learning by reading. When designing the model I had certain requests in view: to be loyal, namely to have a number of sufficient analogies to the original system; to be simple and essential; - to have construction, structure and functionality; - to attract the beneficiaries (pupils/students) in constructing models[4].

To ensure a proper organization of autonomous learning, the following should be mentioned:

- the conclusions of contemporary pedagogy lead towards the idea that the acquirement of knowledge and information is not a priority in the learning contents
- present options focus the learning contents on abilities and competences, namely on operational knowledge: procession and

selection of information, capacity to analyse, synthesize, select, detect, evaluate, self-monitor, etc.

- shifting the formative priorities towards intellectual activity and independent, very autonomous learning;
- extension of learning to other spaces besides educational institutions;
- increasing the role of “how” in relationship with “what” to learn (“learning how to learn”);
- it persists/lingers (for too long) the authority of the teacher that gives “ready-made” information which makes the pupil/student a non-participant in the process of discovering knowledge;
- it is necessary the dissolution of initial learning into continuous learning, as basis for stimulating self-education and autonomous learning;
- the persistence of “the rule of three units”: “learning in the same place, at the same time, the same content”;
- a “social” pressure of the idea of autonomy is manifested for the administration of self-progress in thinking and learning („self - regulated learning”);
- the advantages of *media* culture impose a more and more stressed approach of learning to the study desk

The above mentioned statements converge towards the anticipation of a project of autonomous learning. Before sketching its model, I want to support my intention with some considerations: P. H. Winne (University Simon Fraser of Canada) states that “ *the model of autonomous learning (“self-regulated”) describes the pupil that searches for information in the library that activates a series of skills during his study, fulfilling a process of acquisition (...), pupil that is self-conscious of how much s/he knows, of how much s/he thinks s/he knows and of the differences between these two types of information used when approaching the learning task. S/he understands his/her self-motivation, is conscious of his/her own affects, organizes the activity. S/he deliberates on the finest techniques and global strategies, selects them by predicting the manner each of them can support him in achieving his/her aim.*” (1995). Hamilton and Ghatala (1994) state their opinion on the model of autonomous learning: “*We believe that one of the most useful things a teacher can do for the children is to provide them with tools that are necessary for autonomous learning. Nowadays, information alters in 10 years or less but learning abilities are useful throughout one’s lifetime. (...) The strategies of teaching are efficient only if they provide children with the capacity of assuming their own way of learning*”. Bayron

(1990) states that: „School life consists of an average of 15-20 thousand classes to be seated on a chair in order to assist the presentation of condensed information. And not a single class to learn how to stock, to interiorize and to use knowledge. Who teaches us to find our own way in the labyrinth of those rich libraries, encyclopaedias, workbooks and informational databases”. The Romanian psychologist M. Zlate mentions that: „In order to reach the learning strategies, students have to be helped by the teacher to acquire metacognitive skills, to learn to know their own way of thinking, to monitor and control their ability to process information, to become self-conscious of the existence of certain thinking strategies, their usefulness, the way and moment their conscious activity becomes possible and necessary”[5]. I. Al. Dumitru[6] concurs in these ideas: „Knowing to learn means knowing to learn independently, autonomously, means controlling and guiding self-learning, using certain learning strategies, adopting a personal way of learning”. In his turn, M. Bocoş considers that: „Independent activity can be organized so as to reach different formative or informative didactic goals to cover a large variety of fundamental objectives – discovery, practice, consolidation, thorough study, exemplifying, applying, review, etc of knowledge, skills and intellectual and/or practical abilities” [7] O’Neil (1978) states that „by acquiring and improving (training) strategies like these (self-management skills) the pupil gradually becomes a person that learns and thinks independently. Discretely, we could even refer to inducting the idea of “un schooling of a send to school society” (I. Illich, 1971).

A few reasons make us insist on the design of a model that grants learners more autonomy in administrating their own learning and thinking process. A certain learning independence is maintained by reading via computerized media. Among the advantages we mention:

- tutorial guidance decreases while experience increases and a personal style of independent activity/learning is formed;
- gradual decrease of teacher’s involvement in promoting normative documents (curricula);
- the option for convenient didactic strategies;
- autonomous management of free time;
- monitoring the readings and enriching them to develop critical and autonomous;
- formation and development of independent intellectual work capacity;
- acquiring a learning manner and approaching school learning to adult learning.

The disadvantages of a reading based autonomous learning model could be:

- expressing certain mechanisms of self-protection and demotivation;
- „altering perception of the self”;
- Inducting the feeling of isolation and dissocializing;
- Losing one’s way in the labyrinth of reading.

The synthesis made on learning (Hilgard, 1966, M. Ryder, 2001, M. Ionescu, 2000, I. Dumitru, 2001, I. Jinga, I. Negreș, 1999, E. Macovei, 2001, E. Joița, 2002, M. Bocoș, 2002, M. Miclea, 1999, V. Chiș, 2002, C. Cucuș, 2002) highlight the fact that a new challenge in the evolution of learning models is caused by *cognitive learning*. Despite all signalled lacks (P. Thagard, 1996) – e.g.: it deals only with aspects of thinking, ignoring other psychical processes, based on the model of competition procedures and removing the role of consciousness in knowledge, of metacognition –, J. Delacour (2001) proposes a new model of cognitive learning (see also M. Zlate 1999, M. Miclea 1999, E. Macovei, 2001) based on the idea of “information processing”. Synthesizing, the pedagogue from Craiova city, E. Joița[8] states that in present research and didactic practice there are three widespread essential models:

1. *Fundamental models of information processing:*

- CIP Model (Cognitive Information Processing);
- Cognitive Mechanisms Training Model (J. Larkin, R. Chabay, 1989);
- Procedural Model (D. Andrews, L. Goodson, 1980);
- Procedural Facilities Model (M. Scardamdia, C. Bereitev, 1985);
- Qualitative Mental Model (Frederiksen, 1986);
- Information Processing Model in the Framework of an Intelligent Tutorial (J. Anderson, 1990);
- Intelligent Guidance Code Creation Model (W. Clancey, 1986);
- Reciprocal Teaching Model (A. Brown, A. Palincsar, 1989);
- Example and Self-explanation Remake Model (M. Chi, 1991);
- Problem Solving Learning Model (J. P. Mestie, 2001).

2. Cognitive constructivism (M. Ryder, 2001, R. I. Spiro, 2001, H. Gardner, 1994).

3. Cognitive Apprenticeship Model (A. Collins, J. S. Brown, S. E. Newman, 1989).

Finally, in the same place, E. Joița synthesises the psycho pedagogic researches, naming nine other models of cognitive learning. Unfortunately, none of these models gives any importance to reading as a fundamental

process for the proper function of the relationship between what is learned and the learner. Moreover, within the category of general models for cognitive development (exposition, conversation, demonstration, observation, etc) "*work with the textbook and other auxiliary materials*" is considered a formal method of teaching and training, stress being laid on presenting efficiency conditions only by „*respecting hygienic regulations for reading*".

2. Model of autonomous learning.

The principles that stand at the basis of this model are:

- improving the relationship between educator and learner by making the former interfere only when the latter needs it;
- privileging autonomy and independence as means of unmediated learning;
- modular organization of contents and competences so that the learner can easier and less guided assimilate knowledge;
- considering "school episode" as a segment of the individual's educational development.

The model of personalized learning refers to inducing confidence in the formative virtues of self-learning. It does not combat, correct or copy other models. It provides an alternative that assimilates the consequences of the media impact upon teenagers, as well as upon different types of society to ensure them functional capacities and behaviours. An efficient learning is created by a direct access to the source of knowledge. From our point of view, it is preferable for the texts to be read in advance instead of listening to teachers' comments (or textbook reading) on the text. The only manner to learn efficiently is to read a lot and continuously not only opinions (texts about texts) but also original texts

The framework of expressing the model would be the following: the decision makers fix (through normative documents) the educational objectives and discipline and cross disciplinary competences, checking whether the learner has knowledge and can be motivated by the required competences. The teaching staff would design knowledge models and competence models in the form of learning units and training situations. Further on the educator changes the role of an actor with the one of guide for the pupils, guiding them in the universe of knowledge ("to know") and capacities ("to do"). The learning guidance will be discrete but firm with monitoring, correction and evaluation interferences. Learning results from reading, from autonomous acquisition through knowledge and behavioural

induction sources. School stages will have different but coherent educational objectives, so that initial training is the first stage in the development of one's personality. Its purpose is to prepare the intellectual conditions for a continuous training. The encoded scheme of the trainer's evolution, "continuous training" would be: $F_i 0 - F_i 1 - F_i 2 - F_i 3 - F_i 4 - F_d$; where F_i = initial training, F_d = development training and the numbers 0 – 1 – 2 – 3 – 4 express didactic stages.

- **Pre-school stage** ($F_i 0$) would ensure the uniformity (socializing) "family education" and child preparation for social life in and beyond parental environment;
- **Primary school stage** ($F_i 1$) would be based on majestic organization with teachers for pre-school education, willing to guide pupils towards independent and autonomous activities summing up $\frac{1}{4}$ % of the learning process;
- **Secondary school stage** ($F_i 2$) would be a transition territory from the involvement of educational experts (teachers) to determining motivation for autonomous and independent learning, summing up $\frac{1}{3}$ % of the didactic activities;
- **High school stage** ($F_i 3$) would be dominated by individual, guided autonomy activities, summing up $\frac{1}{2}$ %;
- **University stage** ($F_i 4$) will cover $\frac{2}{3}$ independent activities, signalling the acquisition of a new intellectual work and thorough reading experiences;
- **Permanent self-learning** (F_d) has the characteristics of auto didactic activity, professional factors being involved in monitoring and appreciating functional competences.

This way a school year would last a year but education would last a lifetime. It is recognized the learner's right "*to become what s/he wants to be and to be provided with the necessary resources to become that*". (P. J. C. Allard, 2002).

The society would be able to monitor the learner's evolution through **study and professional credits**. For instance, in their professional evolution (learner's training and development to become useful to the society), individuals will accumulate a number of 1500 credits until retirement. One passed year of initial training will be measured with 60 credits, as follows: $F_i 0 = 180$; $F_i 1 = 240$; $F_i 3 = 240$; $F_i 4 = 240$. The sum is a number of 1.140 credits, the rest of them coming from credits in secondary school finishing exam (20), baccalaureate (20), university graduation exam (20), namely 1200 study credits for initial training.

The professional development is formed of periodic training sessions (gradations) that each will be credited with 60 credits. Any other professional experience, exam will be “rewarded” with study credits, reaching the minimal planned sum. Any new acquisition (PhD, for example) will be credited. A complete monitoring would bring about a permanent motivation for learning, creating in schools and universities premises for acquiring autonomous learning capacities.

If school institutions fail to acknowledge the importance of the model, the whole project will be vitiated and a proper career in a cognitive and informational era will be impossible. The scheme of autonomy-based personalized learning should have the following configuration and administration of professional credits:

Learning stage	Study credits	Direct activity	Independent activity	% teacher's involvement
FI-0; pre-school	180	90%	10%	7/8
FI-1; primary	240	80%	20%	5/8
FI-2; secondary	240	75%	25%	3/4
FI-3; high school	240	50%	50%	1/2
FI-4; university	240	25%	75%	1/4
FC-5-10; self-learning	360	10%	90%	1/8

The whole learning process involves becoming familiar with the technique of individual work, with individual study pedagogy, striving for an autonomous learning style. Direct activity, experience, reading are bases for learning, because they determine the acquisition of information which can be conveyed into knowledge, capacities and new competences. The essential advantage is the one deriving from the statement that a thorough learning involves a proper and systematic environment of experiences.

The model of personalized learning follows the new directions in didactics, revaluing “competence-based pedagogy” as well as the decisive orientation of educational policies towards the “lifelong learning” strategy.

The motivation for promoting a model like this is sustained by several opportunities:

- The necessity to adapt permanently to socio-economic offers and informational challenges;
- Lifelong learning is a way of living;
- individualized learning and education;
- reevaluating the advantages of a “cognitive era” and “digital, informational society”;
- stimulation of youth’s cognitive and metacognitive resources;
- formation of intellectual and social autonomy;
- diminishing the informational monopole, conveyed by school factors (teachers, environment);
- technological sources for documentation;
- time management and its usage in processing informational stimuli;
- promoting a new pace in multiplying novelty and social globalization;
- learners` intellectual and behavioural maturity;
- inadvertence between traditional didactic strategies and the new type of civic personality;
- respecting one’s pace of learning;
- diminishing the authority of school environment and education distribution in other locations;
- the necessity to form personalities with other capacities: autonomy, flexibility, adaptation, creativity, self-teaching, competition, cooperation..

The model of personalized learning does not exclude the existence of teaching staff in a school institution but changes their mission. School institutions are responsible for national education and universal culture (as a means of civilized companionship and opportunity to interact in any environment). That is why they will generate, organize, carry on and evaluate personalized training programmes, suggesting didactic strategies meant to fulfil them. Obviously, individual didactic strategies have a leading role.

The individual learning model (in school and university) is based on the division of learning contents into independent didactic units. Each independent didactic unit will be designed according to educational objectives and will benefit from bibliographical resources (printed and electronic) and experience-based projects (monitored through their effects). Meanwhile, the tutor (teacher) will suggest models of independent activity, the organization and systematization of experiences, providing consultancy, assessment and guidance. In each case, individual study, as autonomous

process and independent thinking act is a means of “inspecting” realities (virtual and real). From the perspective of new epistemic acquisition concerning the learning process, it is more and more risky to talk about “theories of training”. Generally speaking, training means manipulation and doctrines, means revealing the teacher as an authority that guides learning towards subjective targets, leaving the pupil with insufficient individual options. Training had an important period of pedagogic reevaluation. The time for new pedagogic attitudes has come. These attitudes have to be revealed using new terminology, constructivist approach that centres the intentions on *learning theory and methodology*. Training, as guide for teaching, is no longer vigorous and lacks conceptual personality because the new directions of the education process are dominated by competence and behaviour acquisition. These competences can be achieved only by using activities where pupil, student or adult involvement is necessary.

The definition of learning has a criteria stability: “*a process of knowledge or practical abilities acquisition as result of certain experiences*”. Valuable pedagogues and psychologists have stated their opinions regarding the learning process as basis for human development.

Due to new positions within educational activities and behavioural situations, the learning process has acquired new quantity and quality valences. Learning is identified with existence because nothing is sufficient for one to be considered sufficiently educated. Continuous learning involves the necessity to become, to permanently change one’s knowledge and behaviours.

Bibliography

Albulescu, Ion, *Paradigma predării. Activitatea profesorului între rutină și creativitate*, Presa Universitară Clujeană, Cluj-Napoca, 2004.

Allal, L., Saada-Robert, M., *La metacognition cadre conceptuel pour l’etude des regulation en situation scolaires*, Archives de Psychologie, 60, p. 271.

Astolfi, Jean-Pierre, *L’ecole pour apprendre*, E.S.F., Paris, 1992.

Ausubel, P., David, Robinson, G., Floyd, *Învățarea în școală. O introducere în psihologia pedagogică*, Editura Didactică și Pedagogică, București, 1981.

Bocoș, Mușata, *Instruire interactivă. Repere pentru reflecție și acțiune*, Editura Presa Universitară Clujeană, Cluj-Napoca, 2002.

Bonchiș, Elena (coord.), *Învățarea școlară*, Editura Universității Emanuel, Oradea, 2002.

Bruner, S., Jerome, *Procesul educației intelectuale*, Editura Științifică, București, 1970.

- Gagné, M., Robert, *Condițiile învățării*, Editura Didactică și Pedagogică, București, 1976.
- Hilgard, R., Ernest, Bower, H., Gordon, *Teorii ale învățării*, Editura Didactică și Pedagogică, București, 1974.
- Ilica, Anton, *Pedagogie modernă*, Editura Universității „Aurel Vlaicu”, 2009.
- Ionescu, Miron, Bocoș, Mușata, (coord.), *Tratat de didactică modernă*, Editura Paralela 45, Pitești, 2009.
- Ionescu, Miron, *Demersuri creative în predare și învățare*, Editura Presa Universitară Clujeană, Cluj-Napoca, 2000.
- Iucu, B., Romiță, *Instruirea școlară. Perspective teoretice și aplicative*, Editura Polirom, Iași, Ediția a II-a, 2008.
- Jacquinet, Genevieve, *Le dispositif, entre usage et concept*, C.N.R.S., Paris, 1999.
- Joița, Elena, *Educația cognitivă. Fundamente. Metodologie*, Editura Polirom, Iași, 2002.
- Negreț - Dobridor, Ion, Pânișoară Ion-Ovidiu, *Știința învățării. De la teorie la practică*, Editura Polirom, Iași, 2005.
- Piaget, Jean, Chomsky, Naom, *Teorii ale limbajului. Teorii ale învățării*, Editura Politică, București, 1988.
- Radu, Nicolae, *Învățare și gândire*, Editura Științifică și Enciclopedică, 1976.
- Thorndike, L., Edward, *Învățarea umană*, Editura Didactică și Pedagogică, București, 1983.

[1] M. Ionescu, *Demersuri creative în predare și învățare*, 2000, Editura Presa Universitară Clujeană, Cluj-Napoca, p. 59.

[2] R. Iucu, *Instruirea școlară. Perspective teoretice și aplicative*, 2008, Editura Polirom, Iași, p. 56.

[3] Apud R. Iucu,

[4] M. Ionescu, Op. cit., p. 60.

[5] M. Zlate, *Fundamentele psihologiei*, 2002, Editura Nemira, București, p. 79.

[6] I. Al. Dumitru, *Educație și învățare*, 2001, Editura Eurostampa, Timișoara, p. 219.

[7] M. Bocoș, *Instruirea interactivă*, 2002, Editura Casa cărții de știință, Cluj-Napoca, p. 51.

[8] E. Joița, *Educația cognitivă*, 2002, Editura Polirom, Iași, p. 32.