

REFLEXIVITY IN DIDACTIC DESIGN

REFLEXIVITATE ÎN PROIECTAREA DIDACTICĂ

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Abstract. *The research conducted on the issue of teacher training showed a significant contradiction in what concerns the paradigm of initial and continuous training, on the one hand, and the very complex world we live in, on the other. We live in a context of globalization and the most often used metaphors to describe this phenomenon are "global village" and "flat world" (Yong Zhao, 2010). Paradoxically, the teacher training programs are anchored in particular in local needs and less anchored in this comprehensive approach of the world. Nowadays, the paradigm underpinning the teacher education programs is the reflective type. Our study makes practical suggestions regarding the design of curriculum type of the didactic activity, addressed in a reflective framework. We intend, especially, to offer methodological suggestions to those in the initial training as well as for teachers who enrol on continuous training.*

Key words: reflection, reflective teacher, didactic design, initial and continuous training of teachers.

Rezumat. *Cercetările efectuate pe problematica formării profesorilor au evidențiat o contradicție importantă în ceea ce privește paradigma formării inițiale și continue, pe de o parte, și lumea extrem de complexă în care trăim, pe de altă parte. Trăim într-un context al globalizării și metaforele cele mai des folosite pentru a descrie acest fenomen sunt cele de „sat global” și «lume plată» (Yong Zhao, 2010). Paradoxal, programele de formare a profesorilor sunt ancorate mai ales unor nevoi locale și mai puțin sunt ancorate în această abordare globală a lumii. Paradigma care fundamentează azi programele de formare a profesorilor este cea de tip reflexiv. Comunicarea noastră face sugestii practice privind proiectarea de tip curricular a activității didactice, abordată într-un cadru de tip reflexiv. Avem în vedere, mai ales, să oferim sugestii metodologice celor aflați în procesul de formare inițială, precum și profesorilor care se înscriu pe traiectoria formării continue.*

Cuvinte cheie: reflexivitate; profesorul reflexiv; proiectarea didactică; formarea inițială și continuă a profesorilor.

INTRODUCTION

Reflection-in-act

The philosophical meditation has made a major issue from the reflective activity. From that warning written on the temple at Delphi ("Know yourself!"), to Descartes' doubt, the issue of reflection in act was theorized by two American philosophers: John Dewey and then, Donald Schön (1930-1997). Schön developed the reflective practice in learning organizations and communities. He worked closely with Chris Argyris, publishing together three key-publications

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(1974, 1978, 1996). Schön was part of the first wave of theorists who approached the issue of a learning society (with Hutchins, 1970, Etzioni, 1968; Husen, 1974). Schön criticised, among others, the gap between school and life (1987).

By the notion of "reflection-in-action" (Schön, 1983, 1987), he describes the fact that the best professional practice is based on the interdependence of thinking and action („the thinking what they are doing while are doing it.”, Schön, 1987b).

Reflexivity is a kind of philosopher's stone (Marc Romainville, 2006), one of the aspects of the articulation of theory and practice of teaching, one of the paradigms of initial and continuous training of teachers (Heimberg, 2006, Gather Thurler, 2006).

Reflexivity is tacked in a general register: as process of experimentation in practical context (Donald Schön, 1983), as a problem solving process (Capeland, Birmingham, La Cruz, Lewin, 1993, Cruckshand, 1987); as a metacognitive process of action control (Saussez, Paquay, 1996, McAlpine, Weston, Beauchamp, Wiseman, 1999); as a learning process (Schön, 1987, Karthagen, 1993, Saussez, Allal) (*apud* Stanciu, Dumitriu, 2011). The reflexive teacher is essentially an analyst of educational situations seen in their singularity and a factor of reflective decision.

Paradoxically, the programmes of teacher training are anchored more in local needs and less in this global approach of the world (Longview Foundation, 2008).

MATERIAL AND METHOD

The educational-teaching activity, like any human activity, involves an effort for design, of anticipation of the action. The need of designing comes from *praxiological* reasons. "Before you step on the road, you must see it", highlighted a Polish philosopher and logician (Kotarbinski, 1976). From *pedagogical* perspective of the systemic, curriculum-type approach, a training and education situation involves the interaction of several components, the participation of various factors, taking into account the conditions, resources and restrictions. Also, the teaching and educational activities have a conscious, systematic, organized and complex character. On this basis, the school – as educational institution – tries to fulfil the functions which the society has entrusted to them. It follows that the educational activities should be planned, anticipated. It can not be left to the improvisation of the moment, given the consequences of the implications of the achievement for individual and society development. *Psychologically*, the design puts the students in different learning situations, to boost the motivation and the other dimensions of personality (Joita, 1998).

The expression of this need to design the educational plan is the appearance of *instructional design* as a distinct field of pedagogical concerns. Speaking about this issue, the pedagogue Robert Gagne stressed that the key factor of *instructional design* is to design the training. The design issues evolved, being distinguished two **models of action** involved in its accomplishment: the traditional and the curriculum type (Cristea, 1998). The traditional design defines "a restrictive, closed, directive, unilateral teaching activity"; primarily aims at information targets; the assessment is based on fixed criteria and leads to a selection of pupils. The curriculum design takes into account the interdependence of teaching / learning and evaluation components of the educational process and insists mainly on the formative objectives.

The pedagogical design includes "operations of anticipative defining of the objectives, content, learning management strategies, evaluations and especially their

relationships, under specific conditions of a way of organizing the educational process" (Cerghit and Vlasceanu, coord., 1988).

Depending on the time taken for reference, there is an overall design and an echeloned design. **Overall design** is made for a longer period of time (year of study, school cycle), operates with objectives, content and evaluation criteria that have a higher degree of generality; it creates the limits and possibilities of a echeloned design. **Echeloned design** consists in "developing discipline-specific training programs and then a lesson applicable to a classroom". (Cerghit and Vlasceanu, coord., 1988) Normally the teachers operate at this level. The activity is focused on developing training programs. A *training program* shall be identified by: a) components: objectives, content, teaching/learning strategies, assessment methods and techniques; b) relationships between components, which are set on the criterion of optimality (which considers "the expected and achieved level of performance obtained by students in learning"(Cerghit and Vlasceanu, coord., 1988); specify of conditions: educational, psychological and social of design achievement.

RESULTS AND DISCUSSIONS

Levels of educational design

1) A first level of design is the *yearly* one, when it is outlined the didactic approach in the school or in a class by teachers (so do some experienced countries) or, usually, in November the teacher is projecting broadly this approach to the subject he teaches. For this, the teacher will review the curriculum, will opt for a certain type of curriculum (core, extended or depth). From this perspective, he will consult the curriculum and analyze the objectives and the reference of discipline, thematic content, learning activities and curriculum standards. The annual designing may have the following form:

Table 1

Annual design					
Semester	Learning units	No. hours	Distribution of hours on types of lessons		
			Teaching/learning	Review/Systematization	Evaluation

2) *Design per semester* is a continuation of the annual design and consists essentially of: programming units of learning on periods of time; establishing the necessary educational resources for teaching/ learning each unit of teaching/learning, assessment methods. It may have the following form:

Table 2

Design per semester							
No. crt.	Learning unit	Specific competences	No. hours	Succession of units	Date	Type of lesson	Notes

3) *designing on learning units* has several advantages (*apud* MECTS): creates a coherent learning environment where the students' expectations are clear on medium and long term; involves the students in "personal learning projects" on medium and long term; it involves the teacher in a teaching project in medium

and long term; gives perspective to the lessons, so that they integrate into larger units (learning units). The table for designing a learning unit can have the following form:

Table 3

Design of the learning unit					
Contents (details)	Specific competences	Learning activities	No. hours	Means of education	Evaluation (methods and techniques)

The design of the learning unit should be a pragmatic tool for anticipating a student-centred teaching approach. Depending on the experience of each teacher and the discipline they teach, some fields may disappear or others should be introduced.

4) *Designing the lesson* requires (Cerghit coord., 1983): an analysis of the specific task of learning within the unit (task analysis); estimating the intellectual and physical potential of the classrooms (level of knowledge, skills necessary for the transition to a higher level of learning, motivation to learn, work rate and discipline of the class etc.). The teacher should harmonize "the learning objective, way of teaching and the way of evaluating the result." (Gagné and Briggs, 1977)

The teacher has to face several assumptions, alternatives, practices and assessment. He must take several *decisions*, and results in the following sequence of actions:

- ✓ Clear specification of the operational objectives (which show the effects noticed at the end of the lesson);
- ✓ Organization of teaching and learning resources. The means (resources) can be designed in three ways:
 - as values (scientific, literary, artistic, social, action etc.) and which stands for the lesson content;
 - as material tools (teaching aids);
 - as teaching / learning processes (methods, procedures, forms of organization of students, etc.).
- ✓ Adapting the appropriate teaching strategy: an approach to learning (problem-solving, heuristic etc.); as an option for a way to organize the students; as a way of conducting phases and stages (events / training sequences);
- ✓ Developing assessment tools and tests.

The entire action of design is reflected in the drafting of the **teaching project**. It must meet several qualities:

- ❑ To be *completed*, providing "a global and complete overview on the lesson, on the sequence of phases and events to go, time division and use of appropriate means, subordinated as functional whole, final requirements." (Cerghit coord., 1983).
- ❑ To be *feasible* (in terms of content, time, means of education and expected results).

- ❑ To be *realistic* (given the variables of a concrete situation to be achieved).
- ❑ To be *operational* (easy to use and not complicated, taking more time to plan).
- ❑ To be *flexible* (allowing decisions to be taken during the lesson).
- ❑ Have a *strategic structure*; the decision on a change of sequence is based on permanent *feedback* on the quality of the proposed approach).

The lesson can be presented in table form (not necessarily), to express the systemic tackling at an actional level (curriculum type) of the components of the educational process:

Table 4

Lesson design

Sequences of the lesson (time)	Operational objectives	Educational content	Strategies of teaching/ learning			Evaluation
			Methods	Means of learning.	Ways of organization.	

CONCLUSIONS

1. The programs of initial and continuous training for teachers must be more rooted in issues of our world, through a greater openness to global problems, challenges for the future society

2. The paradigm of "reflection-in-act" will allow greater individual anchoring in contemporary world issues and to find, on this basis, viable solutions in specific contexts. We believe that both decision-makers and teachers need more than ever, a clear vision, even in the medium term.

3. In this context, we located the considerations related to teaching design, providing a systemic perspective on it, that will allow the teacher to articulate the main components of the education process so that the process be coherent and efficient.

4. We offered practical reflections on the design per year, per semester, per learning unit and lesson design, in order to eliminate the redundant information and to outline the effective design tools.

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