

THE IMPACT OF THE OPTIMIZATION PROGRAM ON STUDENTS SELF-TRAINING COMPETENCES

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Abstract: *The personalized strategy of self-training is a dynamic construct, with an adaptive role in relation to all the learning conditions characterized by uniqueness and originality due to contextualization. Student self-training competence involves the interdependent functioning of its components, the pre/sub competences: self-awareness- the determination of the internal resources of self-training, external resources of self-training and contextualization of personalized self-training, self-assessment strategies. We developed a theoretical pattern for STUDENTS' SELF-TRAINING COMPETENCE based on the meta-cognitive, psycho-pedagogical (teaching) and (self)management perspective. Formation of STUDENTS' SELF-TRAINING COMPETENCE involves primarily a pedagogical diagnosis, establishing a psycho-pedagogical diagnosis regarding the capabilities of self-training. Any such approach involves the following steps: setting objectives, methodological options for diagnosis, interpretation of results (diagnosis formulation and the formulation of possible predictions). Anyway, a training program of the self-training competence (of students) is basically an ongoing experiment. The design involves an adequate philosophical foundation, relevant criteria, consistency, balance, unity and flexibility.*

Key words: *psycho-pedagogical counseling, personalized self-training strategy, self-training competence*

1. Introduction

Orientating institutions towards skill management determine a "rethinking" of higher education on the principle of training 'generic skills' (R. Foucher, 2000). Expanding the "European Higher Education Area in a global context", networks of transnational mobility of students, teachers and researchers increasingly increasing openness towards "long life learning" priority orientation towards forming generic/transversal skills training - leading to new theoretical and practical approaches in the training of professionals in education.

These are just some of the arguments in favor of the necessity of education for self-training. Higher education is a "reserved space par excellence, for self-training practices" (R. Foucher, 2000). Developing the skills of self-training should be an essential coordinate of policies and educational praxis.

The problem of returning to practices of self-training is contextualized. The need for self-education – as personalized, unassisted or minimally assisted self-training-and therefore education for (self) training - is driven primarily by strong cultural, socio-political and socio-professional mobility. Investigations of meta-cognitive strategies involved in academic learning was initiated in 1990 by M. Hrimech. Interest in theoretical and practical issues of self-instruction crystallize in conceptual elements more well defined (NA Tremblay, 2003), theories that tend to be unifying and inevitably interdisciplinary (AG Straka, 2007). As for Romanian university education the issues of self-education and self-training is a major challenge.

Developing students' self-training competences becomes more and more relevant to the continuous transformations in the field education. We defined competence self as a whole students' ability to organize (design-carry-evaluate) the conditions of their training. We opted for an approach meta-cognitive and self-management of the phrase, because it allowed the formulation of a suitable theoretical model and operational research.

Student self power (CAS) - having an open and dynamic nature, has a set of specific sub-competences: design their own strategies for self (SPA), output / its application and the (self-) evaluation. We developed a theoretical model based on meta-cognitive perspectives, pedagogical (teaching) and (self) management. Thus, the CAS has the following structure:

Table no.1. Students' self-training competence structure

<i>Subcompetence</i>	<i>Subcompetence characteristics</i>	<i>Implied and associated capacities</i>
SPA self-projection	<i>Projection capacities, abilities and of conception</i>	Option formulation for strategy's personalized elements, relations between them and contextualized view: - using data of self-knowledge; -using data describing the context (external) of

		<p>self-training;</p> <ul style="list-style-type: none"> - harnessing data regarding external self-training resources <p><i>SPA Projection:</i></p> <ul style="list-style-type: none"> - formulating the aims of self-training; -establishing of methodological choices on self-training and evaluation; -selecting-organizing the information needed for self-training; -establish appropriate organizational forms; - setting options referring to the use of material resources (space, technology, time) and financial resources.
SPA realization	<i>Realization /implementation</i>	<ul style="list-style-type: none"> - using, in real life situations, self-learning methods and resources.
SPA self-evaluation	<i>Evaluation, meta-component</i>	<ul style="list-style-type: none"> -self-evaluating training results; -self-evaluating the process of self-training as a whole.

2. Coordinates of the training program

Personalized strategy of self-training is a dynamic construct, with an adaptive role in relation to the learning conditions, characterized by uniqueness and originality due to contextualization. Students self-training competence involves interdependent functioning of its components, its pre / sub-competences: self-awareness - the determination of the internal of

resources self-training, to determine external resources of their own training and contextualization of personalized self-training, self-awareness strategy.

Developing these skills requires psychological and pedagogical diagnosis on self capacities. An initiative of this kind involves the following steps: formulation of objectives, methodological options for diagnosis, interpretation of results (diagnostic and possible predictions formulation). This diagnosis is the starting point for the future pedagogical counseling of the student.

Based on the theoretical model we have developed an operational model that allowed the generation of variables and specific tools of investigation: a questionnaire to determine the general level of the CAS and an interview guide (semi-structured) on themes of self-training. The questionnaire is flexible enough, being adapted (Anna N. Tremblay - Questionnaire. Des besoins en autoformation) revealing "critical incidents", the difficulties faced by the student in self-training in a certain field, an issue focused on meta-cognitive aspects.

Individual and micro-group diagnoses set in time, within the current educational activity led to the idea that students do not have self structured coherent functional and efficient scientific skills. Hence the obvious need for experimental investigations centered on a formative program. Such a program is an ongoing experiment. Its core can be synthesized in a didactic principle: differentiation-customization–customization in (self) training, being interdisciplinary and requires a creative implementation.

The central aim of the intervention was to educate students' ability to project, use and evaluate personalized self-training strategies. This is based on didactic meta-cognitive principles, on the selection and organization of specific contents (flexible, permeable, dynamic and self-generating personalized strategies of self-training), on employing a complex methodologically set (adaptive in way of personalization purposes) and favorable forms of organization. Evaluating the results of the program focus on at least two dimensions: advances in self-training competences and the performances they generate.

We designed an experimental program that we have implemented in the MA programs conducted in the Faculty of Education, Psychology and Social Work (Aurel Vlaicu University of Arad) as an optional curriculum entitled "Autodidaxie". The overall objectives were: formation of favorable attitudes auto and self, attitudes of openness to self-education and self-education (especially professional) permanent, general skills training self (the profession in the first place). The program was tested with graduate students in year I.

Theoretical premises underlying the program are:

- prevalent academic learning activity is individual learning, developing self-training competences becomes an explicit formative objective of undergraduate curricular projects;
- opens real opportunities for development of qualities necessary to self-training (fundamental aspects for the modern man);
- the development of self-training skills is complex, dynamic and permanently experimental;
- self-training skills are a dynamic, flexible construct with an adaptive role, marked by originality and uniqueness (through contextualization);
- the formation and development of the specific skills of the teacher is important, the diagnosis one;
- developing self-diagnosis capabilities, the meta-cognitive, autonomy, responsibility, involvement in self-training, socio-professional adaptation to contemporary environment;
- key is the partnership between teacher and student, the program can be managed by one teacher only;
- It is necessary to create optimal conditions for structuring self-training skills (psycho-pedagogical diagnosis, information for developing meta-cognitive bearings, contexts of (self) training to exercise self-awareness capabilities, determining external resources for personalized self-training and (self-) evaluation;
- permanent feedback in relation to work is a necessity.

We hypothesized that overall student performance will increase by scientific development and development of self-training skills. From this hypothesis we derived secondary hypotheses: *self-training skills develop if special programs are implemented in this regard; self-training skills develop by ensuring conditions of practice in exciting activities chosen by the students (curricular or extracurricular)*. The experiment was designed to monitor the formation - development of self-training skills by both the teacher, as well as the student.

Specific research objectives became:

- Developing a program of self-training skills diagnostic;
- designing of diagnostic tools;
- formulating individual behavioral / performance forecasts;
- generating individual and group psycho diagnostics;
- developing theoretical and operational model for formative intervention;
- development and implementation of self training skills;
- evaluating the results of the program.

The main variables involved in the experiment were the following capabilities: self-awareness; determination and management of internal / external required for self-training; design and implementation of personal

strategy self-training, (self) evaluation of the program and its results. The experimental program was applied to a sample of 120 subjects, students in masters programs. Optional curriculum was covered for one semester to 65 students.

3. Data analysis regarding the impact of **the** training program

Initial diagnosis revealed that students have weak and empirically structured self-training skills, of little effectiveness. They own and use little scientific information about self operational capabilities of knowledge management and internal resources involved in self-training, are almost unstructured and non-functional. With minor nuances, we can say the same about their capabilities for determining and managing external resources. Concerning the skills of design-implementation-evaluation of customized strategy of self-training, it was shown that they work spontaneously and are almost unstructured. Items of meta-cognitive characteristic for self-training are few, isolated, random and inarticulate. Therefore creating sequences in self-reflection, (self) training is both necessary and beneficial.

From individual and micro-group diagnosis, I gradually came to shape current and final attempt at self-diagnosis and self-evaluation. Inconsistencies, errors and hesitations were inherent in the diagnosis, monitoring and improving the skills of self are complex processes, contextualized and designed to substantiate the (re) construction of permanent self customized strategies.

Current diagnosis allowed monitoring the progress of students and the micro-group in terms of gradual, quantitative and qualitative structuring sub-competences in question. The final diagnosis and remote evaluations have demonstrated the usefulness of the program:

- at the beginning of the experiment nearly 66% of the students said that self-training is important "to a great extent", and finally 80% of them give a "very high" degree of importance to this question;
- initially, students' opinions regarding the elements required in designing a personal self-training strategy was oriented towards subjective factors, and after the experiment, students (44.6%) give the most importance to "self-knowledge";
- initially 25% of the students said the practice of self-training in at least one area after the experiment 32% of them own strategies based on scientific projects;
- 41.7% of the initial students said "I do not think there is a particular area of where self-training is required" after the experiment 44% of them indicate at least two areas;
- 44.5% of the students initially declared that deal "often" with self-training in a certain field after the experiment 60% of them say this;

- if 56% felt the matter as being of "average difficulty" finally the degree of awareness increased - 74% stated this;
- initially 37% of the subjects "rarely" thought about the fact that self-training involves the calculation of costs and 26% said they think "often" about this, in the end 60% of them said they think "often" about them;
- initially 32% of the subjects stated that "occasionally" they raise the issue of pre-establishing clear self-training objectives, and 30% do it "often"; finally 56% of them "often" think about this issue; it is interesting that 67% of the students considered it a "difficult" problem although initially only 30% perceived as that; this is evidence of an increasing degree of awareness and accountability in relation to the quality of self-training;
- before the experiment, 41% of the students said they think "often" about the design of self-training approaches; after the experiment 52% do so "very often" and 74% felt the planning problem as "relatively difficult";
- initially 33% of the students perceived self-training as being of "average difficulty" after the experiment 70% felt the need to consult other persons on this issue, changing significantly the perspectives regarding time management in special conditions;
- one third of the students declared before and after the experiment that they think "occasionally" about the need to identify individuals whom they may ask support from regarding self-training; but almost 10% more of them perceive it as having 'average difficulty'; students have come to put more frequently and more pertinently questions about assistance in their efforts to self-training; after completing the program they no longer have the impression that it is so "easy" to plan and find links with the experts;
- at the end of the experiment, 41% of the students (compared to 33% initially) said they think "often" about the problems of self-training, but I found that they have a very different feel about difficulty: initially they said it is of "average difficulty" after retesting they considered it "low difficulty"; enlightening discussions on the subject have shown that, in fact, they do not refer to specific aspects of self-training, but a general perspective; I appreciated that, at this level, specific sub-competence is "weakly" structured, although they are aware of the necessity of self-assessment, students' reflections (much less meta-reflections) are timorous;
- initially 41% of the students indicated that they should identify the necessary self-training materials; after doing this experiment 49% do so (78% of them perceive it as a problem of "average difficulty");

- 1/3 of the subjects initially said that they raise "occasionally" the problem regarding the required financial efforts; after the experiment 1/2 think in the same way;
- initially 44% of the subjects reflected about the issue of environment and did it quite "rarely" after the experiment 60% of felt them as being "light" and 52% think "often" about these issues;
- first, 37% of the students said they "often" reflected about the practical transfer of theory; after one semester, nearly 34% do so only "occasionally"; is difficult for a student to design practical theoretical aspects, therefore, after the experiment, the majority (over 85%) said that they think the problem as being of "average difficulty";
- before the experiment, one third of the respondents stated that they "rarely" think about the need to distinguish between conflicting information, after experiment, over 44% of them "often" do this; almost 78% (compared with 41% initially) consider this problem as being of 'average difficulty';
- after completing the program, students realized what "discerning" between the contrary or even contradictory information really means when they selected bibliography, reviewed documents and prepared sets of informational contents;
- We found that 45% of students "rarely" think that during self-training, you may need motivational support (below 30% initially had this opinion); after the experiment 74% of the subjects feel it as being a "difficult environment";
- initially 41% of the subjects "rarely" reflected about their ability to self-train, after the experiment 48% "often" do this.

4. Conclusions

We believe that the program has led to targets being perceived favorably, opening more opportunities for research. We have demonstrated the necessity and usefulness of pedagogical advisors in academic environments. The curricular advisor is a facilitator of effective learning, students receiving support in self-knowledge, especially in terms of learning and training mechanisms. Subjects taking part in the experiment were entitled to realize their resources to activate and exploit them optimally in a personalized manner.

In this context, students can access information and tools to solve problems effectively, become progressively capable of a professional and personal management. Pedagogical counseling, used throughout the program is structured as a service to both students, teachers, managers of the educational process and the educational institution. To the extent that specific, personalized, micro-group, and institutional diagnoses can be made, the advisor becomes a key factor for those involved / interested in the effectiveness of the educational approach. The characteristics of the academic

environment allow us to appreciate that the most appropriate form of psycho-educational counseling are those for "effective learning" and "development".

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