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PSYCHOLOGY AND SCIENCE OF EDUCATION DEPARTMENT

**THE PROFESSIONALIZING OF THE DIDACTIC  
CAREER. PSYCHOPEDAGOGICAL COMPETENCES**

-Doctorate Thesis Summary-

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## **TABLE OF CONTENTS**

### **Part one - Theoretical Fundaments**

#### **Chapter 1 – Current guidelines for initial teacher training**

- 1.1. Teacher training- European cultural dimensions
- 1.2. The Lisbon process
- 1.3. The Bologna process
- 1.4. The experience of some European Union countries

#### **Chapter 2 – The professionalizing of the didactic career**

- 2.1. From romantic apprenticeship to structured competences
- 2.2. Conceptual statements
- 2.3. The analysis of the current initial teacher training programs
- 2.4. Principles of initial teacher training
- 2.5. Taxonomies of didactic competences
- 2.6. Professional standards - current stage
- 2.7. Teaching expertise – a few theoretical guidelines
- 2.8. Didactic competences from the perspective of the educational needs
  - 2.8.1. The concept of need
  - 2.8.2. What are the educational needs?
  - 2.8.3. Educational needs in the current context
  - 2.8.4. Analysis of need
- 2.9. Educational politics of initial and continual training - perspectives
- 2.10. Professionalism in education- condition of progress

### **Part two – Initial training – basis for an efficient teaching career**

#### **Chapter 3 – Methodology and research objectives**

- 3.1. Theoretical considerations regarding the methodology of socio - humanities phenomena research
  - 3.1.1. Specific aspects of the socio-humanities research
  - 3.1.2. General methodology of socio-humanities phenomenon research.  
Methods of pedagogical research
  - 3.1.3. Pedagogical research- technical and practical difficulties
- 3.2. The objectives and hypothesis of research
  - 3.2.1. Analysis of initial training from the perspective of the role and functions of pedagogical practice
  - 3.2.2. Particularities of the artistic curricular area and their effects on initial training
  - 3.2.3. Considerations about didactical competence as an educational finality
  - 3.2.4. Setting the objectives
  - 3.2.5. Research hypothesis
- 3.3. Research methodology
  - 3.3.1. Research methods and techniques
  - 3.3.2. Choosing the sample groups – participants and contents
  - 3.3.3. Research stages and sub-stages -The experimental plan
  - 3.3.4. Expectations

## **Chapter 4 – Observational research**

- 4.1. Analysis of needs in the initial teacher training program-specifics, instruments
  - 4.1.1. The specifics of initial teacher training
  - 4.1.2. Observational research
  - 4.1.3. Data collecting tools
  - 4.1.4. The description of the subjects lot
- 4.2. The analysis of results
  - 4.2.1. Analysis and relevance of the initial questionnaire
  - 4.2.2. The final questionnaire-comparative analyses
  - 4.2.3. Analysis of the docimologic test results
  - 4.2.4. Critical analysis of the investigation
  - 4.2.5. Synthesis of results
- 4.3 Competence needs from the perspective of the beneficiaries of the didactical act
  - 4.3.1. Argument for questioning the students
  - 4.3.2. Presentation of the instruments and sample groups
  - 4.3.3. Results and data analysis
  - 4.3.4. Opportunities and limits in the interpretation of results

## **Chapter 5 – Experimental research**

- 5.1. Theoretical and methodological premises for experimental intervention
- 5.2. The experimental plan
  - 5.2.1. The sample groups in the experiment
  - 5.2.2. Monitoring instruments
  - 5.2.3. Stages of the experiment
- 5.3. Results of the experimental phase
  - 5.3.1 Data regarding psycho-pedagogical competences
  - 5.3.2. Comparative analysis of the lots
  - 5.3.3. Limits in the carrying out of the experiment
  - 5.3.4. Conclusions regarding the experimental phase

## **Chapter 6 – Conclusions**

- 6.1. Summary of research data
- 6.2. The value and limits of the research
- 6.3. The professionalizing of education- desideratum, necessity, possibility
- 6.4. The taxonomic model of pedagogical competences from the perspective of the research results
- 6.5. Suggestions for the optimizing the initial teacher training

## **Bibliography**

## **Annexes**

## PART ONE – THEORETICAL FUNDAMENTS

### Chapter 1 – Current guidelines in initial teacher training

The European Union's strategic objective, established by The European Council in Lisbon (2000), and reaffirmed in Stockholm intends for "*the European Union to become the most competitive and dynamic economy in the world based on comprehensive knowledge, capable of durable economic growth, with more working places and a larger social cohesion.*" This ambitious objective is reflected in the communitarian strategies and plans, regarding the educational system as the principal promoter of socio-cultural development and the edifier of an advanced society based on knowledge. The role of education as the essential instrument in reaching the proposed objectives is unanimously recognized, and the measures to reach this goal are being promoted and recommended to all of the European countries. Education is called upon to accelerate the finding of optimal solutions and to participate in the mending of the present and the construction of the future.

In the year 2000 the European Commission already started recommending a series of structural and curriculum measures for the education system. The first regarded a few principle ideas as guidelines for reconstruction: emphasis on democratic values, encouragement of continuing education, multiculturalism. Later reports channeled the effort towards identifying and defining those elements that can contribute to the development of a society based on knowledge. The access to knowledge and the forming of psycho-behavioral instruments in order to achieve this knowledge is the responsibility of the school, more precisely the responsibility of the teachers, such that their appropriate training becomes imperiously a priority. *The Report regarding the objectives of the educational systems and professional training*, adopted by the Educational Council of the European Council, on 12.02.2001, reiterated in 2002, proposes a plan with the following general objectives:

O. 1. *The growth of quality and efficiency in the educational systems and professional training in the European Union. The improvement of the educational system, the preparation of teachers and the ones who train them*

Teachers are the key-factor in a strategy for socio-economic development. To successfully fulfill their social role they themselves must be prepared to face the challenges of a society based on knowledge, and to start into the system adequately qualified. It is also imperative to redefine the profession on a social level in order to attract the top classified graduates.

O. 2. *Developing competence for a society of knowledge*

We are talking about those aptitudes and competences through which any individual can affirm himself/ herself in society, in a certain field. The package of special aptitudes must be developed in the mandatory educational system, at the same time it must offer conditions for restructuring over the course of one's life.

O. 3. *IT access for everyone*

It has become a necessity in the society of today and tomorrow due to the impact that e-learning has on our world and implicitly on our education.

O. 4. *The growth of recruitment in the technical and scientific studies*

Attracting the youth towards the technical, scientific, research fields must be started in schools by teachers capable to mediate between student and science. These fields show a deficit of students and qualified teachers.

O. 5. *A better use of resources*

It refers to the need for investing in education as well as equally distributing the financial and material resources in the educational system, to be able to create values and plus-values. The relation between cost and benefit in educational investment must be positive.

In this context, the initial preparation of teachers as well as their continuing preparation became the preoccupation of the contemporary European society, materialized in punctual strategies and objectives. The interest in redefining the teacher's role and status in conformity with the new requirements is justified by the many challenges teachers encounter. The decrease in the number of future students, doubled by a decline in quality, residual selection, the lack of motivation and attraction to this discipline are just a few of the observed dysfunctions. These can be found abundantly in the Romanian educational system. It is imperative to rethink the preparatory model and to correlate all the components in the systems to assure an efficient and productive function. The major insufficiency of the Romanian Educational System is the lack of coherence and cohesion between the main components of the system, which has generated most of the dysfunctions of today's system.

## **Chapter 2 – The professionalizing of the didactic career**

Professionalism is the practice of a skill as a professional, appropriate to a specialized professional method. In conformity with this semantic the teacher is a professional, a professional because without his qualifications, in accordance with the rules and laws of the system, he cannot exercise his job. Before the establishment of the Preparatory Department for Didactic Personnel, the preparation in the subject matter was considered the strong point for starting an educational career. A college diploma was sufficient to start an educational career.

Once the PDDP was established and the educational/pedagogical package was implemented as an access to an educational career, initial preparation gained the character of real professionalism. This aims at a set of characteristic competences meant to offer the teacher the necessary skills for an efficient handling of the classroom activities. Professionalism could then be approached as a radical redefinition of skills for a quality educational practice.

Regarding the professionalism of the educational career there are few key concepts that are being considered:

**The Initial Preparation** is defined as a building process of a set of skills that allow the individual to act creatively and flexibly in the field for which he has trained. The creative and flexible vectors are essential in the educational process as future agents for change.

**The Continuing Preparation** must not be considered just as a continuation of the initial preparation. The two forms can be integrated in the initial phase of preparation in the perspective of the need of permanent education. Going beyond the traditional understanding of the term "to specialize", continuing preparation tends to become a long- term process of permanent learning, with basis in the early stages of preparation.

**The teachers' specialization** is a pedagogical and social activity planned, developed and achieved in the educational system with a managerial function of continual regulation and self-regulation of the educational process at every level.

**Pedagogical Competence** has had a large number of criteria of study and evaluation and developed a large number of definitions. Having them in consideration and given the theme of my research I came up with a personal definition of this concept: Pedagogical Competence represents a set of knowledge, traits, skills, and qualities that assure the functioning within parameters of the educational act, and the reaching of short and long term educational goals, objectified in structure changes in student personality.

At present the formation of the psycho-pedagogical competence is assured through a set of disciplines that comprise 336 hours of theoretical and practical preparation divided over the course of the three years of study. The curriculum contains the theoretical psycho-pedagogical preparation and is compatible with the European systems. There are some

dysfunctions generated by the way it is organized, by the distribution of the classes, by the way the program is viewed within the university, and by student attitude. The most common deficiencies in the initial preparation are:

- the lack of efficient ways of selection regarding participants' skills and motivation.
- student option is at random and not motivated by personal interest in an educational career.
- the psycho-pedagogical disciplines are marginalized in the academic curriculum.
- the preparation is dissipated on a rather long period of time and does not facilitate the integration of theory and practice.
- the pedagogical teaching practice is insufficient, inadequate, fragmentary in between the other classes gravely affecting the learning and consolidation of competence.
- the certificate for minimal pedagogical competence is irrelevant.

A more efficient preparation for teachers, given the context of our country's integration in the European Union, has to have as basis of preparation the common European principles, established in 2005 by the Cultural and Educational Direction of the European Commission. These principles give only the strategic guidelines for action, leaving upon each country to develop its own principles for a better quality and more efficient process.

The Common European Principles are:

- *A very good professional preparation*
- *Placement in a permanent educational context*
- *Professional mobility*
- *Profession based on partnership*

The necessity to increase the quality of professional preparation of teachers in our country can be fulfilled through programs that eliminate the actual dysfunctions. Fundamental principles as basis for the changes cannot be omitted in the creation of the new programs. In accordance with the new legislation in education that requires a master degree for the initial preparation, the development of these programs should in my opinion be based on the following principles:

I. Attracting the best qualified graduates

II. Integrative study –theoretical disciplines- teaching practice

III. A practice-and applied evaluation

IV. Openness towards the continuing preparation

V. Preparation for the collaboration with the community

Establishing the minimum set of psycho-pedagogical competences necessary for the functional educational act remains important for the quality of education. Different taxonomies regarding educational competence have been manipulated in the field throughout history, and regardless of the time between them, we cannot observe major discrepancies. Yesterday like today, and maybe like tomorrow, at the declarative-conceptual level, teacher requirements are the same, whether they are presented in very elaborate concepts, or more restrictive ones. In a global- integrative acceptance pedagogical competence is a very complex structure with its multi dimensional characteristics, and because it deals with very diverse human resources, each with its own peculiarities, which incontestably confers each action a unique nuance. The development of a taxonomy is useful to create a curriculum in which the above mentioned competences can be shaped, exercised and perfected.

To be able to talk about professionalism in education we must be able to report it to the system of qualifications adopted by the European Union, as well as to a national standard of professionalism. Standards as a *criteria and guideline of quality and quantity for those working in education* are nothing new. They were always part of the system in different forms: as laws, methodologies, exam requirements, criteria for awards, advancement, etc... These kinds of standards are not sufficiently explicit and transparent in content, they are not

interconnected, not relevant enough regarding the measured competence, and they are not organized to be used as a consistent national program in either initial or continuing preparation. Furthermore, the responsibility of creating and elaborating these methods of evaluation is divided between more institutions and structures which diminishes responsibility and obstructs the coherence of different instruments.

Under these circumstances a national strategy based on professional standards was necessary to delineate the training conditions, the ones attesting acquired competence and the ones for ulterior professional growth. The national standardization of the requirements in education started in 2001, but despite all efforts and all involved resources the process has not yet been finalized.

One evident aspect which needs to be integrated in the strategy of professionalizing the teaching career is that for the need of education. The institutional educational system is meant to offer “programs” for the formation and development of the members of society that support and define its coordinates. At the same time these “programs” must undergo constant adjustment in accordance with social and economical changes creating changes in the educational system itself. The Institutional Educational System, with all its components, tried to answer some fundamental questions: For whom must it exist? What is it needed for? Why should it be in a certain way and not in another? Why specific knowledge and not a different one? Why so much and not less or even more? Why so much time? etc. With time the answer to these kinds of questions has been given explicitly or implicitly, depending on the type of society, the decision making forums, the pedagogical theories, which makes one suspect the arbitrary, the improvisation, and even manipulation by different powerful groups to satisfy their own interest. They have always been promoted as “necessary”, “must”, being identified as educational necessities even though their formulation was not based on any analysis.

The analysis of these educational needs should become the indispensable instrument of management evaluation from the macro system level to the level of every school, and its particular educational process. The need for education suffered quantitative and structural mutations in an alert rhythm and the educational system was unable to keep up with them. The adjustments and readjustments were done “along the way” in different departments, using ad-hoc priorities generating confusion and incoherence. It became clear for those interested that the need for education is growing and becoming more diverse quicker than the necessary resources for its satisfaction can be created. The premises for this way of dealing with it were partly created or at least declared as intentions in documents and legislations released by the decision-makers.

The professionalism in the educational career is not a last minute concept, but now we consider its redefinition from a social system based on knowledge, as the European Community aspires to, and our country implicitly. To have professionalism in the educational career implies to circumscribe those aspects that describe, explain, classify and determine specific qualities of the respective activity. I consider the following integrated aspects as structural for the professionalism of the education career:

- Clear principles of action at the macro and micro pedagogical levels.
- Competences in the initial and continuing preparation.
- Precise professional standards, relevant and functional in appreciating the quality of initial preparation, continuing preparation and the activity itself.
- Flexible and efficient institutional forms of professionalizing.

The initial training as well as the continuing training are in the attention of the specialists, who consider ways to optimize them, they are part of the educational politics for a national strategy that hopes to bring about the so much desired and awaited increase in quality.

## PART TWO – INITIAL TRAINING – BASIS FOR AN EFFICIENT TEACHING CAREER

### Chapter 3 - Methodology and research objectives

#### 3.1. Theoretical considerations with regards to the methodology of socio–humanities phenomena research

The socio-humanities reality, education being part of it, cannot omit some important conceptual binomials which make the inquiry process a difficult step, hard to be inscribed in the irrefutable scientific canons. These conceptual binomials (P. Ilut, 1997) interpreted from the perspective of an educational phenomenon are:

- a. The *objective-subjective* binomial is present in any socio-humanities phenomenon, even more so in the educational reality, which is a complex and versatile one. In the educational act there are structures controlled by the social actor (student, teacher) and structures that escape the individual control.
- b. The *macro-micro* perspective (global-local) of a social phenomenon has in consideration the dimension and complexity of the analyzed social group and the global perspective of a reality versus the detailed analysis of the specific components of that reality and the relation that exists between the factors and variables.
- c. Between *universal and contextual*, the second's predominant part in the educational phenomenon is hard to dispute if we have in consideration human attitude and behavior and the diversity of the educational reality.
- d. The relation *theoretical- empirical* in researching the educational phenomenon is usually a duality, two complementary dimensions of a whole, no matter the starting point of the research.
- e. From the *natural-provoked* perspective, in pedagogical research, the first variant is the dominant one with all the limitations, difficulties, risks, and costs it implies.
- f. The conceptual duality *emic (inside) -etic (outside)* refers to the difference between description and explanation of a reality by the group itself or by an external factor.

The socio-humanities disciplines have raised numerous discussions regarding the areas of knowledge, often hard to delimitate, as well as regarding the specific methods that most of them use, without diminishing the scientific aspect of the research. They use the following methods of investigation: the experiment, observation, document analysis, inquiry, interview.

The pedagogical research methodology divides the components in three categories (M.Bocos, 2003) diversifying the palette using specific versions of general methods and by adding certain methods of a psychological nature. In accordance with the author, mentioned above, in the pedagogical research we can delineate the following categories:

- a) *Methods of collecting data necessary for the research*
- b) *Methods of measuring the data*
- c) *Methods of mathematical – statistical processing and interpreting of the data*

A rigorous and scientific research must anticipate, through an articulated strategy, the steps that are to be taken in the investigation depending on its single or multiple intentions. The strategy objectifies itself in an initial research project which must be flexible enough to allow adjustments if changes occur during the different stages of the research.

An important concern in pedagogical research refers to the methodological instruments of investigation as well as the instruments for gathering information relevant for the intended objectives. It is generally acknowledged that a single method of research, no matter how good it is, does not guarantee an exhaustive understanding of the phenomenon. To



reduce methodological risk, the triangulation techniques, borrowed from physical measurements, are recommended and which for the educational phenomenon mean the study of human behavior from more perspectives (Bocos M., 2003). The methodological limits and practical difficulties of pedagogical research must not be neglected, most of them having as basis the complexity and dynamics of the educational phenomenon. Regardless of the human, methodological, practical, technical difficulties the pedagogical research remains the primary source for innovation in the educational system, a way through which the good practice can be identified and generalized, leading to a permanent amelioration and optimization of this important social domain.

### **3.2. The objectives and hypothesis of research**

The method of training teaching competences has been discussed more and more at the international conferences for professional teacher preparation. During these debates the traditional system has been criticized as being unilateral, a system in which teachers are informed about the fields and science of education instead of having the possibility of acquiring professional skills that are applicable, innovative and relevant to the teaching process.

To improve the training of teachers it is necessary to stress the teaching- learning-evaluation abilities of future teachers and to limit the trainers' predilection for general theoretical discourses. Frequently criticized is the contradiction between "the abstract theory" and "the real practical problems" in the field at the university level. If in the teaching of the content of the subject matter there has been some improvement made, at the pedagogical practice level it seems that the situation has not changed much from its previous state. Though at the declarative level the decision making factors or non decisional factors agree upon the need of a qualitative practical training, the reality at the university level shows many unsolved matters:

- The pedagogical practice is scheduled in between other classes and is perceived by the majority of the students as a marginal requirement.
- The theoretical courses precede the pedagogical practice thus generating a formal learning that lacks the intuitive support.
- The number of practice classes is too small and sometimes the student, unilaterally, reduces it even more.
- Students do not take the classes seriously considering the didactical option as a "plan B" alternative.
- The pedagogical educators are not able to cover all the necessities in monitoring the classes having relatively large groups of students to coordinate.
- The mentor educators are not selected on precise criteria of professional skills.

Working with the aspects concerning the function and status of the pedagogical practice in initial teacher training has as a starting point the postulate that it represents a key element in developing the psycho-pedagogical competences of the future teacher. The idea springs from observing the differences of competence that exist between the elementary and pre-elementary teachers trained in the pedagogical high schools and those trained at the two or four year colleges. There are no significant differences between these two systems regarding the disciplines or the assimilated content. The difference can only be the consequence of more consistent, diversified and better theory integrated pedagogical practice, such as it used to be in the pre-university pedagogical system.

Though all teachers recognize the importance of practicing the pedagogical skills and abilities in real activities, the pedagogical practice is a "Cinderella" in the university program. The establishing of research objectives has in consideration two directions of action:

- a) to elaborate a profile of pedagogical competences by analyzing the necessities of the beneficiaries.
- b) to prove through factual data and rigorous measurements, in a formative experiment, that the practical preparation is the most important component of the initial training for the future teacher.

The direction of research was structured on two complementary experimental sessions: an observational stage and a formative one. Their principle objectives were the following:

- the evaluation of the teacher training program by the beneficiaries.
- to establish a profile of teacher competences centered on the necessities of today's generation of pupils.
- to experiment a formative model of organizing, monitoring and evaluating the practical training of students.

### **3.3. Research Methodology**

In the observational stage I used the investigative method through questionnaires and a docimologic test. The information was gathered using structured tests given to the target groups regarding different aspects of interest in the chosen theme.

A set of questionnaires was given to a representative sample group of students in middle school and high school aiming to pencil an accurate profile of the abilities best used or brought out by today's students. The intention of this instrument was to bring to light abilities and qualities, of a general nature, which are not strictly connected to any specific part of the curriculum.

Another set of questionnaires was put together to collect data regarding the students' perception of their personal psycho-pedagogical and educational training in the PDDP program, their training needs, expected results and achieved results after the pedagogical practice. To compensate for the declarative character of the information obtained in the questionnaires I used a docimologic test, the results of which reflect more objectively the existing situation.

The second phase deals with a natural pedagogical experiment which introduces two supplementary stages in the pedagogical practice, a week long each, and measures their formative effects. For the systematic collection of information about pedagogical skills and competences I conceived a variety of cards to be used by the subjects of the experiment, over the course of the entire practice session. These cards will reflect the progress during the observed practice period and will also be used as instruments to activate and exercise different pedagogical skills and knowledge. The systematic evaluation of the acquired skills was obtained by the mentor teachers through a special single card used by both the experimental group and the control group.

The accomplishment of the intended objective required different sets of students for each of the two stages. The set of subject-students for the observing stage comprised almost the whole population of the "Gh. Dima" Music Academy enrolled in the third year of study during the 2008-2009 school year. The limited number of students in the institute, due to its vocational character, allowed for all of them to be included in the research, but because of objective reasons 109 out of the 127 students agreed to participate.

The sets of pupils had to be chosen from a very large and heterogenic target population, age wise and as intellectual level of operation. I opted to select groups of eighth and eleventh grade students from several schools in Cluj-Napoca. The students were chosen by cluster type selection from urban middle schools and middle school classes existent in high schools. The size of each sample group was established after a pilot investigation for the

validation and finalization of the questionnaire and consisted of 247 eighth graders and 403 eleventh graders.

In the formative experiment the sample group was selected from a given school-population, relatively limited, that is the students at the “Gh. Dima” Music Academy, Cluj-Napoca. This category is relatively limited at the national level as well, due to the vocational aspect of the artistic education institutions. The empiric research comprised the students registered in the Musical Pedagogy Department in the third year of study during the 2008-2009 school year, year when the pedagogical practice session is implemented. I opted for the students of this department because it explicitly trains students to become future Music teachers.

Although the research monitors and measures the competence acquired during the pedagogical practice sessions for teaching Music, in essence regardless of the subject matter taught, the mechanism used to develop skills and abilities, even their nature and content are very similar.

The contents that were the object of the experiment are the ones included in the Musical Education Plan for the 5<sup>th</sup> through 8<sup>th</sup> grades. The subject matter of each lesson is not relevant for the goal of the research, which regards the general pedagogical skills and follows each mentor teacher’s semester plan, with no preferential selection. Although being compact the sessions offered the opportunity for a greater diversity of themes and classes for the subjects in the experimental lot, an aspect which cannot be found in the practice classes usually carried out by students.

The process of investigation its phases and actions are synthesized in the following table.

**Table nr.1 – Research plan**

Stages/sub-stages		Period	Operations and actions
Research preparation	Development of instruments for gathering data	March-June 2008	Consulted bibliography referring to writing a questionnaire and referring to the pedagogical practice. Developed the necessary instruments for research: questionnaires, test, observation cards and lesson analysis cards, cards for lesson evaluation.
	Pilot-investigations	June 2008	Gave the student questionnaire to a pilot-lot, with the aim of finalizing the items.
	Choosing the sample groups from the pre-university level	February 2009	Identified middle schools and high schools which would provide the 8th and 11th grade students for the sample groups
Carrying out of the research	Questioning and testing of students at the „Gh. Dima” Music Academy	October 2008	Gave the initial questionnaire and the docimologic test to all of the third year students. Chose the sample group of subjects for the formative experiment.
	Observational investigation at the pre-university level.	March-June 2009	Gave the questionnaire of needs to the students in the selected schools.
	Carrying out of intensive practice sessions by the students in the experimental group.	December 2008 - February 2009	Organized and carried out the formative phase over two one week sessions. Monitored activity with the specially designed instruments.

Stages/sub-stages		Period	Operations and actions
	Reevaluation of the knowledge/competences level, after the pedagogical practice session	May 2009	Gave the docimologic test to all of the students, no matter if they took part in the experiment or not.
Analysis and interpretation of results. Research conclusions.	The organizing of the gathered data for quantitative and qualitative processing. Statistical processing. Qualitative analysis Elaboration of thesis	January-December 2010	The picture of didactical competences from the perspective of the beneficiaries.  Validation of hypothesis.  Drawing the conclusions of the research.  Structuring and writing of the thesis.

The psycho-pedagogical competences encompass a wide array of abilities, skills, traits that ensure teaching efficiency, not as much through a spectacular presence of one or the other of the components but through the integrated result of all of them together. The actual teaching process activates the majority of the abilities and traits which give the measure of efficiency and is also the way through which they can be “stimulated”. The exercising of abilities is a way of forming, consolidating and perfecting oneself in any field of activity, substantially contributing to what is referred to as professional expertise. With the aim of increasing the quality of education in mind, the concept of expertise is more and more vehemently claimed as one of the key elements in this equation.

This expertise cannot be obtained through the initial training program no matter how well thought-out, organized and applied it would be. It entails the accumulation of direct experience, as consistent and varied as possible so that it covers most or at least the majority of the situations that the future teacher might be confronted with. The initial training must provide the future teacher with already consolidated abilities and skills, so that the teaching can be carried out at an acceptable level of efficiency right from the start of their career. Appreciating that the formation of the future teachers through direct pedagogical practice is the most efficient way of forming the necessary abilities, I consider that a substantially larger number of teaching hours would significantly improve the quality of the process. The number of teaching hours, experimentally introduced, is 9 to 10 over the two sessions, added to the 4 to 5 mandatory ones. The significant improvement in the results obtained by the experimental group, for the same subject matter training as well as for the psycho-pedagogical theoretical training, gives us the right to consider this positive effect to be due to the intense and consistent teaching practice.

## Chapter 4 – Observational research

### 4.1. Analysis of need of the initial teacher training program -specifics, instruments-

Analyzing the way in which the initial psycho-pedagogical training is organized can offer a perspective for the direction of optimizing interventions. First to be noticed is the gap between theoretical preparation and the practice of it. The practice sessions begin only after the completion of the theoretical courses. Even in integrated courses or in ingenious applied studies, it is difficult to overcome the theoretical character of knowledge and the formalism of the acquired abilities. The distance in time between theory and practice leads to the loss of a

consistent amount of knowledge that has not had the chance to be consolidated. Another aspect that affects efficiency is the fact that the students appreciate or utilize very little or not at all the didactical experience they gained while in high school or middle school.

The national education plan for teacher training (however pertinent and in harmony with the community) requires the preparation within the limits of the prescribed curriculum. Therefore the analysis of the needs and interventions can only be done within the proposed program.

The initial training program is part of the three years of undergraduate studies, with the specific disciplines equally and logically distributed over the entire period. The didactic competence preparation should be the integrated- cumulative result of all stages undertaken. From the perspective of the analysis of needs the question that arises is when would be the right moment to make it? As a rule the analysis of needs must precede the training program, in order to contribute to its definition. The program for initial teacher training is predefined and mandatory. Furthermore, the psycho-pedagogic field is new to the students, who although were part of the system as high school pupils, could only with difficulty identify their needs, other than through very concrete and partial nominalizations. A consecutive analysis of the initial training program has the disadvantage that it is distanced in time from most of the components of the formative package, which can affect the objectivity of the gathered data.

The subject of the research and its focus on the didactic competence training achieved through the pedagogical practice session have determined me to make an analysis of the entire program in two successive stages: after the completion of the psycho-pedagogical and methodical disciplines, that is at the beginning of the third year and the end of the third year of studies when the students have finalized the entire training program.

The questionnaires given to the students were based on items with closed answers, to ensure the accuracy of the data as well as to prevent a too great dispersion of results. Still, certain items allowed free answers, meant to give the subjects the possibility to formulate other situations than the ones enumerated. I also limited the number of items to a reasonable quantity, in order to avoid boredom and the subjects' loss of interest and attention. This made me operate mostly with categories, which had as an effect the decrease in the ability of nuance, and presumed rather than expressed explanations.

The declarative character of the answers obtained through the questionnaires demanded correlation with more objective data over the competences acquired by the students in the initial training program. For this I utilized two control methods: the grades obtained at the psycho-pedagogical disciplines exams and a composite test for knowledge and abilities, considered to be finalities of the training. I must recognize that the grades obtained at the exams are not always an objective guideline for the real competences acquired by a student, because an evaluation based on criteria is frequently used. Another observation refers to the docimologic test in which the majority of the items deal more with knowledge and less with abilities, for reasons that have to do with the specifics of didactic competence, difficult to be operated and put into concentrated choices of answers. Didactic competences can be better observed in the concrete behavior of real situations, but these cannot be put on paper, and some of them are hard to measure and quantify even in the applied version. At the same time, we can suppose that a good knowledge of the pedagogical and methodical concepts denotes an interest in personal development and usually leads to well manifested competences.

## 4.2 The analysis of the results

Students received an initial version of the questionnaire at the beginning of their third year of study. It is structured on three points of interest: knowledge of their subject matter, psycho-pedagogical knowledge, expectations from their pedagogical practice.

A second questionnaire, with a similar structure but which collects data from the perspective of the application of their knowledge and the effectiveness of their skills, was given to the same subjects at the end of the school year.

Questionnaires are useful tools for collecting certain data but they are marked by the declarative character of the answers which determines a certain degree of incertitude, depending on different variables. In order to control the credibility of the gathered data we took the same students and tested their pedagogical and methodical capability and knowledge of the whole course and its application during the session of pedagogical practice.

The data gathered is so vast that I preferred to present a brief version containing the most significant results.

**Table nr.2** – Synthesis of the results

Evaluated aspects		Quantitative guidelines	Qualitative observations
Training in the subject matter		90% good and very good	The declarative character raises suspicion of over-evaluation. The comparison of control at this parameter did not constitute the subject of research.
Pedagogical training		85% good and very good	Opinion sustained by the grades obtained at exams (grade point average of 7.59) but not by the test results themselves. Discordance with the answers for more punctual items.
Methodical training		75% good and very good	A grade point average of 8,04 confirms the good opinion of the subjects but is not correlated with the test results. The professors of Didactics, appreciate their students' preparation as being mediocre and poor.
Categories of knowledge appreciated as good or very good	Objectives and their formulation	66%	The information is of a declarative nature and can be considered as false perception. The test results indicate a much lower percentage of success for the corresponding items.
	Teaching strategies	72%	
	Strategies for evaluation	49%	
Categories of knowledge recognized as poor and very poor	Planning	74%	The planning, mastered only theoretically, is not efficient for the training. The application of the curriculum would be more useful for initial training. Class management was not included in the course of study.
	Curriculum	67%	
	Class management	83%	
Objectives reached during the pedagogical practice	The application of theoretical knowledge	53,21% To a lower degree	Many students don't feel the usefulness of theoretical knowledge in the praxis of education. The teaching practice session was the best way to exercise the ability to
	The exercise of the lesson plan	83% To a great and medium degree	

Evaluated aspects		Quantitative guidelines	Qualitative observations
	The acquiring of practical pedagogical abilities	58,5% To a great and medium degree	develop a lesson plan. A lot of the students don't think that they acquired practical pedagogical capabilities. Most of the students were satisfied with their own performance but their mentors don't totally support the good opinion and recognize the criteria based evaluation.
	The carrying out of some successful practice lessons	89% To a great and medium degree	
The utility of the teaching practice session		More than 50% of the students found that this session was useful for them, to a great or medium degree, for: getting to know a teacher's work load, getting used to develop a lesson plan, exercising teaching, or for choosing or avoiding a didactical career. The session was considered of little value for the familiarization with the school.	
Difficulties encountered during the pedagogical practice session		The results indicate a more evident polarization in the lesson planning department (68%). Other difficulties may be acceptable in percentage numbers ranging between 45 and 55. None of the students indicated other difficulties than the ones prescribed.	
Motivation for a didactical career		43% positive motivation	Less than 50% of the students who are involved in the initial training program, find the idea of a didactical career attractive. The lack of motivation is the most important cause for the low level of interest in the psycho-pedagogical training.
Global appreciations of the initial training program	Practice is the most useful component	75,23%	The refusal of excessive theorization extends to academic education, at least for the PDDP component. Students recognize the utility of the teaching practice session but also the fact that there are too few actual teaching hours and that they themselves do not treat the matter with enough responsibility. The link between theory and practice constitutes the weakest point of the current program. Even though they participate in the PDDP program out of their own free will, the students admit the fact that an initial selection would be necessary. Many of the students have a traditional perspective about the didactical profession.
	Students view the practice session with superficiality	75%	
	There is too much theory to be studied	79%	
	Pedagogical theoretical knowledge is not very useful	68,5%	
	Too few teaching hours	82,5%	
	Good knowledge of the subject matter is enough for a good teacher	66%	
	Students should be selected before being admitted in the PDDP program	92, 6%	
Results of the docimologic test	Minimum and maximum result (out of 100 points)	28 - 80	The performances for the knowledge/abilities test are modest. None of the students performed at a very good level. The teaching practice did not generate the growth of the knowledge/capability level. Students are not used to multiple choice tests.
	Average performance	56,07	
	Average number of correct answers (out of a 25 possible)	14,01	
	Medium percentage of exactitude	56,07%	
	Very poor and poor	37,14 %	

Evaluated aspects		Quantitative guidelines	Qualitative observations
	Below mediocre	28,52 %	Most of the students do not have the minimal pedagogical competences, able to be objectified in conceptual forms.
	Mediocre	29,52 %	
	Good	4,76 %	

The investigation was affected by the constraints imposed by the National Education Plan which prescribes certain curricular limits, temporal and content-wise. The questionnaires designed to collect data have tried to respect all of the conditions of a scientific instrument. Despite this we could not avoid the declarative character of the answers the objectivity of which can be altered by different factors. I consider that over evaluation and false perception were the most frequent factors that distorted the appreciations made by the subjects. The comparison of the declarative answers from the questionnaires with the grades received in the psycho-pedagogical classes and the teaching practice denotes a good convergence but this cannot constitute a very credible guideline. I think that the results for the knowledge/skills test more faithfully reflect the students' level of preparation achieved in the teacher training program. The test was designed in accordance with the norms and by consciously taking the risk that the results might not fall within the limits of a normal distribution.

Even if the study was limited to the subjects of a vocational institution, I consider that the situation is not very different from the one found in other universities, confronted with the same problems in preparing students using the DPPD program.

#### **4.3. The need for competence from the perspective of the beneficiaries of the didactic act**

The questioning of the beneficiaries regarding the educational process, the actions that they appreciate or reject or their teacher's efficiency is not only necessary but also constructive, with the aim of improving the initial teacher training. The opinions of today's students, more familiar with the exercise of democracy, can draw a picture of their expectations from the school, from their teachers, from the way in which they are asked to participate in educational activities, from the promoted interpersonal rapports, etc. This type of an enterprise is not risk free, students belonging to a system, the declining efficiency of which has already been proven, might not come up with the most credible and pertinent answers. Even so, I find an insight into what students prefer and expect from their education, to be opportune in the context of the current research.

The students in question were chosen using a cluster type selection. They represent the school age population of eighth and eleventh graders in Cluj-Napoca. The 247 eighth graders and 403 eleventh graders, come from diverse social backgrounds, different schools from all areas of the city having been chosen. The defining criteria for the selection of the schools was: location and for area of attraction of the school age population the secondary level; location and specialty for the high school level. The high schools included in the selection were chosen in such a way as cover to the most frequent specialties and to respect their real proportion in the system. Therefore we can appreciate that these subjects reflect the local socio-economic structure. The sample group can be representative for the entire school age urban population in our country because the educational process is relatively unitary through : curriculum, goals, the system of teacher initial and continual training, the instruments used for periodical control and evaluation, etc.

The educational needs exist, they are present in the social reality of the different groups of individuals, they can even be different for comparable groups and one of the concerns is to acknowledge them and not to replace them with "rationally" determined models. On this concept I based the foundation of my observations of the students, on their needs concerning their teachers. The gathered data is numerous and cannot be punctually



presented in a concise presentation. I have included the most important tendencies and orientations in an abbreviated version structured on referential domains.

### ***Curricular guidelines***

- the existing curricular areas cover a large palette of needs and interests for the formation of the new generations;
- students show less interest in the science related classes (Math, Chemistry, Physics);
- the attraction for certain classes is highly motivated by personal interest, being aware of their practicality and the qualities of the teacher and how he/she handles the class;
- the disinterest for some classes is strongly motivated by their theoretical nature, the monotony of the lessons, the feeling of the absence of personal formative benefits and poor teaching performance;

### ***Competency guidelines***

- students appreciate the explicative qualities of the didactic act;
- the most desired action for acquiring new knowledge is the traditional teaching method with its high explicative value;
- the most appreciated pedagogical competencies are training in the subject matter and communication skills;
- the most appreciated teacher qualities are calm and patience;

### ***Relational guidelines***

- some of the teachers are perceived as being subjective in the treatment and evaluation of the students;
- a pretty high percentage of students think that teachers are indifferent towards them and their problems or that they treat some behavior with too much indulgence;
- many students feel that they are misunderstood by their teachers;
- most of the students are well integrated in the group to which they belong;
- to a great extent students believe that they do not have a great influence over the life and activity in their school;
- at least half of the students think that they are stimulated to formulate their own opinions about things;
- a number of teachers fulfill their duty with responsibility and enthusiasm;

The quantitative and qualitative analysis of the questionnaire results shows some of the students' needs concerning the educational process. The overall picture is relatively general due to the limits of the instrument used to collect the data. For the goal of this investigation though this overall picture is sufficient because it offers some clear directions of intervention. Beyond the general needs for the quality of the didactic act there is a cohort of special needs, according to the different fields of study, as well as specific needs for certain age groups, specialty groups, institutional groups, etc. One single questionnaire cannot cover such an extensive and complex area of educational needs but it can act as a starting point for the continuation and of the research.

One aspect that limits the drawing of precise conclusions is the diffused character of some of the results and the absence of massive polarization toward one type or another of appreciation. The data that gather around the middle percentage numbers, of agreement or disagreement, must be viewed with circumspection. The researcher has proposed the answer variables by "rational" selection from desirable models or personal experience. They represent a certain significance, specific to the pedagogue, about which we don't know how it functions in the decoding operated by the subjects. Sensing these risks I have formulated the

answer variables in a less pedagogically conceptualized language in order to make their comprehension more unitary. Even so, the student responses may have been influenced by the different degrees of understanding of some concepts, institutional experiences, etc.

## **Chapter 5 – Experimental research**

### **5.1. The theoretical and methodological premises of experimental intervention**

The formative experiment is the technique which best allows to check the link between two variables. The pedagogical or psycho-pedagogical experiment is always a natural one, carried out in real-life situations. With all the difficulties and risks of research under natural conditions, the data obtained is valuable and constitutes a solid basis for the formulation of decisions. Furthermore, experimentation amidst the real educational praxis is the surest way of acquiring knowledge and of fundamental and responsible ameliorative intervention.

In the experiment planned for this research, using the specific statistical instruments, I intended to factually prove the role of practice in the formation of didactical competences. Even though the specialists in Science Education and the teachers recognize the importance of the pedagogical practice session for the initial training, there is no study to scientifically attest this conviction. And, maybe, to determine the decision-making factors to reconsider the number of hours and the structure of this important component of initial teacher training.

### **5.2. The carrying out of the experiment**

The selection of the experimental group/set was made using stratified sampling to ensure a good equivalency with the control lot regarding the age, social group, sex, results obtained in the psycho-pedagogical courses.

*Sample groups of subjects:*

- 10 third year students, Musical Pedagogy – experimental lot
- 10 third year students, Musical Pedagogy – control lot

The monitoring instruments for the pedagogical practice sessions comprised of three models of cards for the observation of the demonstrative classes, constructed on the progressive and complementary principle, that is from simple to complex and from a few elements to all relevant components of a didactic act. Each model-card was analyzed with the students before application, the concepts were clarified for a better understanding and they received detailed explanations about how to jot down their observations.

The instrument that allowed the measuring of the effects produced by the independent variable that was introduced in the pedagogical practice program was the mentor teacher's evaluation card. The aim of the experiment necessitated a very complex and detailed instrument for the evaluation of the students' lessons, to permit the most exact quantification, by components and as a whole. It also required a supplementary effort from the mentor teacher, due to the dimensions and the precision imposed by the context of the experiment. For the general guidance of student practice I recommend a more operational version.

The experimental phase was carried out over the entire 2008-2009 school year, through the official pedagogical training program and the special program, which was only for the students in the target group. The subject in the experimental lot used only the special cards for observation which they received in turn, at the periodic meetings. The get-togethers with the subjects, aimed to collect feedback about details, obstacles, dysfunctions in the pedagogical practice that could not be noted on the cards.

The two weeks of intensive practice, added to the mandatory program, for the students in the experimental group, took place in December- February, before the mandatory classes. Every week the students planned and carried out 4 to 5 lessons, usually one lesson a day.

Though the students had the option of taking over all of the classes the teacher had for that week, and in this way to multiply their opportunities of action, I did not consider this as opportune for several reasons:

- I used only three mentor teachers, that each coordinated 3 or 4 students from the experimental lot, for 6 and 7 weeks out of the school year.
- There was the risk that the students from the experimental group would abandon the project considering the effort too much for them.
- So they would have sufficient time to prepare the lessons from one day to another.
- So as to disturb as little as possible the normal teaching process and the schedule of the students.

### 5.3. The results of the experimental session

The measuring of the achieved competences was done using the evaluating card specially elaborated for the experiment. It is structured on two components: one based on concept and one on action. The one based on action was divided into five subcomponents: behavior during the class, the carrying-out of the lesson, the relationship with the pupils, the evaluation and management of the class. For each component/subcomponent there are few indicators of evaluation that had to be graded using a scale with five steps of success.

The quantitative and qualitative results of the subjects participating in the experimental group clearly show the progress made during the formative period, for all the evaluated components, but this reality was predictable. Other elements of interest were: the initial level, the dynamics of the progress, dimensions with a slower or limited evolution, feasibility and the limits of the instrument, etc. To exemplify we show the total number of points received by the students for the first and the last of the practice lessons they taught during the formative period.

**Table nr. 3** – Rate of success out of the maximum possible, comparative for lessons 1 and 10

Subjects	Lesson 1		Lesson 10	
	Score	Proportion out of maximum possible	Score	Proportion out of maximum possible
1	79	37,62%	156	74,29%
2	90	42,86%	157	74,76%
3	101	48,10%	159	75,71%
4	106	50,48%	166	79,05%
5	111	52,86%	166	79,05%
6	115	54,76%	173	82,38%
7	120	57,14%	175	83,33%
8	124	59,05%	179	85,24%
9	130	61,90%	185	88,10%
10	140	66,67%	192	91,43%

Regardless of the level of knowledge from which the subjects started, they all progressed, which proves the constructive character of the psycho-pedagogical competences. The abilities, traits, skills necessary for the didactic profession can be formed and developed through learning so that they correspond, at least at a minimal level, to quality standards. The total number of points is a global indicator which says nothing about the components of the measured competences, about abilities, skills, punctual didactic behavior, obtained through practice. Not to overload this summary with too much quantitative information I will present only a qualitative analysis of the progress, by components.

In the planning phase the student is, usually, pretty rigorously guided by the teacher so that his performances are acceptable and so that his progress is quick. In comparison with the

global performance, for the planning component the starting point was better and the final results achieved close to maximum or even maximum possible points. The indicators that took longer to reach perfection (for which the students had points taken off) over the course of their training were: the planning of evaluation, the organizing of the activities and the estimation of the necessary time for each event.

The action component includes five subcomponents, each having a certain autonomy in relation with the others. They had specific indicators and were appreciated and graded independently.

The behavior during the lesson reflects the student's personality and certain qualities that the future teacher naturally possesses or that he/she can improve over time. Of course that some of the personal parameters, with all the effort, cannot be entirely overcome, in such a short period of time: especially the ones that have to do with temperament, voice characteristics, activism, affective dominant. A long term didactical practice combined with the desire for professional success, will lead in the end to a style which will harmoniously combine personal traits with the efficiency requirements. The subjects in the experimental lot quickly learned that they must prepare ahead of time all of the didactical materials and means needed, that they must have an appropriate appearance, that they must modulate the intensity of their voice and their flow of words. They were less successful in creating an adequate dynamic for the lesson: the naturally slower ones did not become more dynamic, and the "hurried" ones could not temper their rhythm. They also had difficulties in conveying to the pupils, through their own behavior, a state of emulation and of learning stimulation.

The actual carrying out of the lesson is a very complex activity which is a measure of many attributes, traditionally and even currently associated with didactic efficiency. The profound knowledge of the subject matter, the communication qualities, the coherence of the didactic strategy, the activation of the pupils' knowledge, the type of learning experience proposed, the connection with the pupils are just a few of these attributes. For this component (lesson achievement) I proposed most of the indicators, which does not mean that I entirely covered the domain. I thought that they are relevant, noticeable and quantifiable in the context of the experiment. Of course that in the planning of the lesson the students tried "to learn" the content they were teaching, but their performance depends also on the quality of their general knowledge of the particular subject matter. The communication qualities are also influenced by the knowledge of the subject matter as well as by a rich vocabulary, in general. As for the didactic strategy and the fixing of the new knowledge the coordination of the planning was beneficial for ensuring a reasonable level of success, on the action level as well. Less accomplished remained the educative development of the content and the correlations within and among different fields, but these are lacking even with more experienced teachers.

Regarding the relationship with the pupils the future teachers did not expect difficulties, probably, due to the fact that they perceived them from a purely psychological perspective, as a sort of rapport with younger brothers, whom you dominate but you can also convince to join in the activities. Data proves that, at least as regards the measured indicators, the relational abilities were pretty low at the beginning but they increased along the process, more than others, reaching superior values at the end of the formative period. Under the guidance of the mentor teacher the students understood: that they must also activate the pupils that do not raise their hands; that it is good to combine the frontal actions with independent or group activities; that the learning and the answers of the pupils deserve to be strengthened with adequate feedback. There was less progress from the point of view of pupil motivation and the differentiation or individualization of the didactic activities.

Most of the managerial aspects are natural results of the didactical strategies, of the coherence of the learning experiences proposed to the pupils, of their adequacy and relational status. In establishing the indicators for this component I took into consideration the fact that

the students had had no theoretical preparation in classroom management, having thus to rely on their intuition, on personal observation and the mentor teacher's indications. The behaviors aimed at represent a minimum of requirements that condition the functionality of the didactical activity. The capacity of maintaining order in the classroom was aided greatly by the teacher's presence in the classroom which lead to good grades for most of the students, although the accomplishment was not entirely due to their own abilities. The students' habit of permanently observing what is going on in the classroom evolved progressively, as the tension of the first lessons gradually dissipated and the trust in their abilities increased. Things evolved in the same way with the interventions to grab the pupils' attention, which were inexistent or minimal at the beginning, and became opportune and more diversified as the session progressed. The different instructions and the distribution of the workload to the pupils as well as the organizing of the learning process, especially the individual kind, were the indicators for which some of the students were unable to receive maximum evaluation from the evaluator.

The component that seems to lack the most regarding the progress of achievement is the evaluative one but I think that this is due to proposed evaluation indicators and not necessarily to the students' inability. Using the card indicators I tried to cover the most important aspects of the evaluation. The progress made by the subjects in the actions of evaluation fall within the same parameters as for other components (between 20 and 30 points) fact that denotes a coherent and unitary evolution in the obtaining of the different abilities circumscribed in the didactical competences. The percentage numbers that were lower than the maximum possible are due to some of the proposed indicators, that is the grading process, the explanation of the evaluation criteria and the capacity for self-analysis of the lesson. The mentor teacher's attitude of avoiding to propose and to allow students to grade the pupils is frequent, depriving them of an important exercise and an instrument of motivation. The ability of self-analyzing a lesson is affected by emotions and lack of experience. Facing a group of pupils with whom he/she has to accomplish certain didactic tasks, overrun by emotions, the student concentrates on the multiple duties he/she wants to handle satisfactorily. By the end of the lesson it is very hard for him/her to remember and to evaluate all of the moments, all of the pupils' behaviors including his/her own, especially if he/she is timid.

During the second semester of the school year the students enrolled in the practice session teach four practice lessons and one final lesson. The experimental lot followed the normal course of pedagogical practice, but they also had an advantage of nine to ten practice lessons performed during the two supplementary sessions. The mandatory pedagogical practice program offered the possibility and the opportunity to compare student performances in both groups in order to validate the hypothesis of the research.

Strictly quantitatively analyzed the performances of the subjects in the experimental group are superior to the ones of the control group, starting with the first lesson and the growth continues in the same over the entire duration, including for the final lesson. It must be said though that the performances of the control group are similar with those of the experimental group, beginning with the first five lessons of the formative session. The progress made by the subjects in both groups is similar either judged by components or using a qualitative analysis. The similar evolution of the performances for all the subjects, pretty linear and with little differentiation among them, proves that the practice of planning and of teaching actual real lessons has the same formative effect. By practicing the instructive-educative act, with competent and rigorous guidance, the students ameliorate their abilities for all the measured dimensions, gradually building didactic competences. The difference between the groups resides in the quantity of the exercise as the quality of the guidance remained constant, being provided by the same practice professor and same mentor teachers.

The validation of the research hypothesis in the formative experiment was to be expected but I had to prove that the differences in performance between the two lots are statistically significant, and that they are due to independent variables introduced throughout the process. The statistical processing used in calculating the significance of the difference between the two groups shows an index smaller than 0.5 both for the total points as well as for the partial points, of the evaluation components. These indicators confirm that the differences are significant and in the given conditions, they are due to the independent variables introduced in the experiment.

Overall the formative intervention has proved to be statistically relevant for the significance of performance differences between the experimental groups. Seeing that the equivalency of the two groups was assured and the cognitive or non-cognitive factors were not part of the criteria of selection, the difference in performance is justified by the experience obtained during the formative period.

At the end of the formative session all of the subjects recorded an increase of 20 to 30 percentage points over the initial level, and the following five lessons brought an additional growth for those who had a slower progress or had weaker starting point. Ten practice lessons were sufficient for some of the subjects, who after that apparently stagnated, while others reached superior performances, only after the following five lessons. The subjects of the control group, who practiced their skills in the five mandatory lessons only, showed about the same progress but did not have the opportunity to continue their formation up to a good and very good level of achievement.

There were some difficulties and limits in the achievement of the experiment which I classified in two categories: having to do with planning and with accomplishment. On the planning level choosing the convenient moment for the carrying out of the formative phases was a challenge. It was not easy to convince the mentor teachers or the students to participate in the research. On the accomplishment level I was confronted with different student behavior that could have jeopardized the results of the experiment and even the experiment itself.

## **Chapter 6 – Conclusions**

The underlining of the value and the limits of this research is suitable for a SWOT type analysis, which gives some opportunities to the strong points and certain risks to the weak points.

### ***Strong Points***

- The questioning of students, as beneficiaries of the educational process, regarding their expectations towards their teachers as providers of learning experiences but also in their role as educators of the young generation.
- The diagnosis of the current system of initial teacher training, using the case study of a higher learning institution.
- The empiric validation of the formative value of pedagogical practice over didactic competence.
- The evaluation of the effects of pedagogical practice based on competence indicators which can be transferred to other curricular fields.
- The proposal of a pedagogical competence model based on diagnosis and analysis of needs.
- Suggestions for ameliorating the current initial teacher training program and for the development of a new program of studies.

### ***Weak Points***

- The sample group of students was local.

- The study case and diagnosis may illustrate a particular situation which might not be representative on a national level.
- The suspicion of standard evaluation of the subjects in both lots involved in the experiment, with consequences over knowing the objective rate of success.
- The limits of the data collecting instruments during all of the stages of research.

### ***Opportunities***

- The questioning of students, using nationally representative sample groups, about some punctual aspects of the didactic process, in order to determine the real needs of the system.
- The start of a national project for the diagnosis of the initial training programs, based on unique evaluation parameters, with a focus on learning results.
- Using the pertinent results that can be generalized for the development of the initial training program required by the new Law of education.
- An opening towards the research of possibilities for quality increase in pre-university education, using the analysis of needs at the national, local and institutional levels, which can be rapidly and adequately satisfied.

### ***Risks***

- Difficulties in the implementation of any sort of measures or programs due to multiple and hard to control causes: human factors, mentalities, legislative and methodological incoherence, economical conditions, the involvement of the state, precarious monitoring, deficiencies of the control and evaluation instruments, etc.

Although the research included students preparing to become Music teachers, the results can be transferred to other curricular areas. Pedagogical competences are at the same time general and specific: they are general as a constructivist paradigm but special in their actual and pragmatic realization. Planning ability, for example, is formed on the same coordinates, whatever the subject matter, Romanian, History or Music. The inventory of methods, procedures, strategies is not specific so that it can be taken as such or adapted for any of the curricular areas. And the list of examples can abound for any of the dimensions of the didactic process. In the end, pedagogical competence is what the current generation and the generation of a predictable future need, not in essence but in detail and not global but in the context of a specific society.

The pedagogical competences are such a complex reality that research can clarify only very limited aspects and even those not entirely. The subtlety of “the craft” cannot be transformed into measurable variables and remains the task of the self-formation and self-perfection achieved through the determination of each teacher. The research intended to be a source of knowledge about the dimensions meant to be used for the amelioration of the initial teacher training program.

The taxonomy that resulted from the investigation is structured around the basic functions of education-teaching-learning-evaluation- and proposes a set of summative-integrative abilities for each type of competence. For example, to be able to develop the annual/semester plans, the teacher has to possess the ability to analyze the national program, to select the essential content, to predict the difficulties, to adapt it to the target group, etc. Gaining the ability to plan, globally appreciated, would thus include all of the included abilities. The scenario is the same for all the other competences in the proposed model. A simpler and more synthetic taxonomy would have some advantages hard to dispute:

- it would be easier to be standardized;
- it would reduce the risk of indicator redundancy;
- it would direct the training process towards its essential element;

- it would promote the unity of evaluation by reducing subjectivity in the comprehension of the criteria;
- it would ameliorate the tendency to formally complete the evaluation instruments;

The study shows some of the most important limits and dysfunctions of the current model in initial training, which are not specific only to the institution where the subjects were studied, they can be extrapolated to the whole system. Within the limits of the current legislation regarding initial teacher training program, a few changes would be operable, with minimum amendments to the law, which would correct some of the deficiencies. Meanwhile the initial teacher training has been looked over and will be achieved through graduate training (Master degree). The new law of education brings about an important adjustment, to a dysfunctional coordinate-pedagogical practice. The law requires a one year pedagogical practice session, which is beneficial, but other important aspects are not clear yet: integration between theory and practice; access to schools for the practice session; finding the mentor teachers for students; the evaluation of the achieved competences, etc. Thus far the only positive variable is the consistency of pedagogical practice.

The students who train for becoming a teacher and the pupils who benefit from these competences represent resources of information that have been insufficiently exploited until now. Their opinions are relative and cannot substitute the rational development of the training programs, but can be the basis for some measures that can make them more efficient. In the deep crisis that affects our current educational system, reforms should not come from politicians, they cannot be imported, and they will not be feasible without a thorough analysis of the system, of the needs, opportunities and possibilities.

Teachers are an essential resource in a good educational system which aims to train the future generations for a society based on knowledge and to transform education into a promoter of socio-economic development. Creating optimal conditions for the training of efficient teachers implies complex and well-correlated measures of a legislative, structural, functional, institutional nature.

## Bibliography

- Alexandrescu, Ion, 1982, *Personality and Vocation*, Junimea, Iasi;
- Armstrong, Michael, 2001, *A Handbook of Human Resource Management Practice*. Bucharest: Codecs.
- Audigier, Francois, 1993, *Enseigner la societe, transmettre des valeurs*, Les edition du Conseil de l-Europe, Strasbourg;
- Ausubel, David, P., Robinson, G. Floyd, 1981, *School Learning: An Introduction to Educational Psychology*, Didactic and Pedagogical Press, Bucharest;
- Becker, Gary, S., 1997, *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, All, Bucharest;
- Bernstein, Basil, 1992, *La construction du discours pedagogique et les modalites de sa pratique*, In: Critique sociaux, nr.3-4;
- Birzea, Cezar, 1994, *Les politiques educatives dans les pays en transition*, Les editions du Conseil of Europa;
- Birzea, Cezar, 1995, *The Art and Science of Education*, Didactic and Pedagogical Press, Bucharest.
- Birzea, Cezar, (coordinator), 2001, *Permanent Learning- A priority of Romanian Educational Policy*, ISE, Bucharest;



Bocos Musata, 2001, *The Planning and Evaluation of Instructional Sequences*, Science Book Publishers, Cluj-Napoca;

Bocos Musata, 2002, *Interactive Instruction*, Cluj University Press.

Bocos Musata, 2003, *Pedagogical Research*, Science Book Publishers, Cluj-Napoca;

Bocos Musata, Jucan Dana, 2007, *The Theory and Methodology of Instruction. The Theory and Methodology of Evaluation-Didactical Guidelines and Tools for Teacher Preparation*, second edition, Parallel 45 Publishing House, Pitesti;

Bocos Musata, 2007, *The Didactics of Pedagogical Disciplines*, Parallel 45 Publishing House, Pitesti;

Bontas, Ioan, 1995, *Pedagogy*, second edition, All Educational Press, Bucharest;

Boissinot, Alain, F.C, 1994, *Mission du professeur exerçant en college, en licee d'enseignement generale et technologique ou en licee professionnel*, B.O. nr.22/1997, IUFM, Creteil, Note de service, 1994;

Bradshaw, John, 1972, *The Concept of Social Need*, New Society, March, pag.640-643;

Bruinsma, Marjon, 2004, *Motivation, Cognitive Processing and Achievement in Higher Education*, Learning and Instruction magazine, 14;

Bumbuc, Stefania, 2009, *The professionalizing of the Teacher Preparation Process. Theoretical and Applicative Models*, Doctorate Thesis, Bucharest University;

Carcea, I. Maria, and Voicu, Mihai, 1997, *Preparation of the Professional Career. A Creative Approach*, Performatica Press, Iasi;

Carre, Philippe, Moisan, A., Poisson, D., 1997, *L'autoformation. Psychopedagogie, Inginierie, Sociologie*, Presses Universitaires de France, Paris;

Cerghit, Ioan, 2002, *Alternative and Complementary Instructional Systems. Structures, Styles and Strategies*, Aramis Press, Bucharest;

Cerghit, Ioan, Neacsu, I., Negret, I. Panisoara, I-O., 2001, *Pedagogical Discourses*, Polirom, Iasi;

Champy, Philippe, Eteve, C., 2000, *Dictionnaire encyclopedique de l'education et de la formation*, Nathan, Paris;

Chis, Vasile, 2000, *Contemporary Educational Systems: Structure, Leadership and Paradigms of Reform*, in Studies of Applied Pedagogy, Cluj University Press, Cluj-Napoca;

Chis, Vasile, 2001, *Teacher Activity Between Curriculum and Evaluation*, Cluj University Press;

Chis, Vasile, 2002, *The Challenges of Contemporary Pedagogy*, Cluj University Press;

Chis, Vasile, 2005, *Contemporary Pedagogy-Pedagogy for Competence*, Science Book Press, Cluj-Napoca;

Chelcea, Septimiu, 2007, *How to write a Graduate Dissertation, a Doctorate Thesis, a Scientific Article in the Socio-Humanities Field*, fourth edition, Communication.ro Publishing House, Bucharest;

Ciolan, Lucia, 2008, *Integrated Learning. Fundamentals for an Interdisciplinary Curriculum*, Polirom, Iasi;

Conard, M. A., 2006, *Aptitude is not enough: How Personality and Behavior Predict Academic Performance*, Journal of Research in Personality 40;

Costandache, Mirela, 2001, *Initial Teacher Preparation in the Teaching Colleges*, Muntenia&Leda Publishing House, Constanta;

Dave, R.H., 1991, *The Fundamentals of Permanent Education*, Didactic and Pedagogical Press, Bucharest;

Delaire, Guy, 1991, *Enseigner ou la dynamique d'une relation*, Les Editions d'Organisation, Paris;

Delors, Jaques, 2000, *Inner Treasure, The International Committee for Education in the Twentieth Century's Report to UNESCO*, Polirom, Iasi;

De Peretti, Andre, *Education in perpetual change*, 1996, Spiru Haret, Iasi;

De Peretti, Andre, Legrand, J.A., J. Boniface, 2001, *Communication Techniques*, Polirom, Iasi;

Dewey, John, 1972, *Democracy and Education*, Didactic and Pedagogical Press, Bucharest;

Diaconu, Mihai, 2002, *Pedagogical Competence and the Professional Performance*, in Professional Standards for the Didactic Profession;

*Dictionary of Pedagogy*, 1979, Didactic and Pedagogical Press, Bucharest;

Doyal, Len, Ina Gough, 1991, *A Theory of Human Need*, Macmillan, London;

Dragu, Anca, 1988, *The Structure of Teacher Personality*, Didactic and Pedagogical Press, Bucharest;

Dragan Ioan, Nicola Ioan, 1993, *Psycho-pedagogical Research*, Tipomur, Targu-Mures;

Dur, Karlheinz, 2005, *L'ecole: une communaute d'apprentissage de la democratie. Etude panneuropeene sur la participation des eleves*, Conseil de L'Europe, Strasbourg;

Eurydice, 1997, *Educational Information Network in the European Community*, Continual Training for Teachers in the European Union and the AELS/SEE states, Alternative Press, Bucharest;

Georgescu, Dumitru, 1999, *Educational Reform-A Chance for the Changing of Mentality*, Three Publishing House, Bucharest;

Georoceanu, Bogdan, 2002, *Permanent Teacher Training Through E-Learning*, Bucharest University;

Gherghinescu, Ruxandra, 1999, *The Role and the Place of Empathy in the Didactic Competence Structure*, in Didactic Competence. A Psychological Perspective, All Educational Press, Bucharest;

Golu, Pantelimon, Mitrofan N., 1982, *Psychological Dimensions of Didactic Competence*, in Psychology magazine nr.2;

Goodin, Robert, 1990, *-Relative Needs*, in Goodin, Robert, Allan Ware (coordinator)-Needs and Welfare, Sage Publication, London, Newbury Park;

Goodin, Robert, Allan Ware, 1990, *-Introduction*, in Goodin, Robert, Allan Ware (coordinator)-Needs and Welfare, Sage Publication, London, Newbury Park;

Gravitz, Madeleine, 1972/1996, *Methodes de science sociales*, Paris, Dalloz;

Hainault, David, L., 1981, *Permanent Education And Teaching Programs*, Didactic and Pedagogical Press, Bucharest;

Hatos, Adrian, 2006, *The Sociology of Education*, Polirom, Iasi;

Hopkins, Diana, Ainscow, M., West, M., 1998, *School Transformation in an Era of Change*;

Ilut, Petru, 1997, *The Qualitative Approach of the Socio-Human*, Polirom, Iasi;

Ionescu, Miron, 1980, *Strategies for Student Involvement in the Teaching Process*, Babes-Bolyai University, Cluj-Napoca;

Ionescu, Miron, 1998, *Education and its Dynamic*, Teaching Tribune Press, Bucharest;

Ionescu, Miron, 2000, *Creative Directions in Teaching and Learning*, Cluj University Press, Cluj-Napoca;

Ionescu, Miron, *Innovation and its diffusion in school practice*, Pedagogy magazine nr.10;

Ionescu, Miron, Chis, V., 2001, *Pedagogy-Supports for Teacher Training*, Cluj University Press, Cluj-Napoca;

Ionescu, Miron, Radu I., etc., 1997, *Debates on Applied Didactics*, Cluj University Press, Cluj-Napoca;

Ionescu, Miron, Radu I., *Different ways of Psycho-pedagogical Investigation*, Pedagogy magazine nr.3;

Ionescu, Miron, Radu I., *Evaluating the Results of a Psycho-pedagogical Investigation*, Pedagogy magazine nr.4;

Ionescu, Miron, Radu I., 2001, *Modern Didactics*, revised second edition, Dacia, Cluj-Napoca;

Iucu, Romita, B., 1999, *Class Management*, “Dimitrie Bolintineanu” Cultural Foundation Press, Bucharest;

Iucu, Romita, 2007, *Teacher Training. Systems, Policies, Strategies*, Humanitas Educational, Bucharest;

Iucu, Romita, Ion Ovidiu Panisoara, 2000, *Teacher Training*, UMC Press, Bucharest;

Iucu, Romita, Ion Ovidiu Panisoara, 2000, *Teacher Training. Research report 1 and 2*, Ministry of Education, the National Teacher Training Council;

Jinga, Ioan, Istrate, E., 1998, *Teachers’ Professional Competence in Pedagogy Handbook*, All Educational Press, Bucharest;

Jinga, Ioan, Negret, I., 1994, *Efficient Learning*, EDITIS Press, Bucharest;

Joita, Elena, 2006, *Constructivist Instruction- An Alternative. Fundamentals. Strategies*, Aramis Press, Bucharest;

Joita, Elena (coordinator), 2007, *Teacher Training. Cognitive-Constructivist Learning Tools*, Didactic and Pedagogical Press, Bucharest;

Kelly, James, A., 2000, *Teaching Standards*, in Professional Standards for Didactic Activity, L. Gliga coordinator, Ministry of Education, Bucharest;

Labar, Adrian, V., 2008, *SPSS for the Science of Education. Methodology of Data Analysis in Pedagogical Research*, Polirom, Iasi;

Luca, Marcela, R., 2003, *Personality and Professional Success*, Transylvania University Press, Brasov;

Lyon, David, 1998, *Postmodernity*, DuStyle Press, Bucharest;

Maciuc, Irina, 1998, *Teacher Training. Alternative Models and Linear Programs*, Didactic and Pedagogical Press, Bucharest;

Marcus, Stroe, and collaborators, 1999, *Didactic Competence-A Psychological Perspective*, All Press, Bucharest;

Mathison, Sandra, 2005, *Encyclopedia of Evaluation*. Sage, London.

McDavid, James, C., Hawthorn Laura, R.L., 2006, *Program Evaluation & Performance Measurement*. Sage, London;

Ministry of Education (M.E.), 2002, *Professional Standards for the Didactic Profession*, Polsib, Bucharest;

M.E., *Law 288/2004 for organizing university education*;

M.E., 2005, *The law for ensuring and evaluating the quality of pre-university education*;

M.E., 2006, *A.R.A.C.I.P.-Practical Handbook for Evaluating the Quality of Education*;

M.E., 2002, *CNFP,-Mentor Status*;

Mialaret, Gaston, 1979, *Vocabulaire de l’éducation*. Education et sciences de l’éducation, P.U.F.;

Mialaret, Gaston, 1999, *Psychologie de l’éducation*, P.U.F., Paris;

Miroiu, Adrian, 1998, *Today’s Romanian Educational System*, Polirom, Iasi;

Mitrofan, Nicolae, 1988, *The Pedagogical Aptitude*, Academy Press, Bucharest;

Moeglin, Pierre, 2003, *Education Industries and the New Media*, Polirom, Iasi;

Monteil, Jean-Marc., 1997, (1989), *Education and Training. Psychosocial Perspectives*, Polirom, Iasi;

Moore, Kenneth, 1992, *Classroom Teaching Skills*, Mc.Graw-Hill, Inc., New-York;

Muster, Dumitru, 1985, *Research Methodology for Education and Teaching*, Letter Press;

Neacsu, Ioan, 1998, *The Romanian School at the Beginning of the Third Millennium*, Paideia, Bucharest;

Neacsu, Ioan, 1999, *Training and Learning*, Didactic and Pedagogical Press, Bucharest;

Neacsu, Ioan, Felea, Gheorghe, (coordinator), 2004, *Ensuring Quality of Education. European Values and Romanian Projects for ensuring quality of the Pre-university Education*, Galati School Press, Galati;

Neacsu, Ioan, 2006, *Independent Academic Learning. Methodological Handbook*. University course, Bucharest University: College of Psychology and Education Science;

Negovan, Valeria, 2004, *Career Psychology*, Student Press, Bucharest;

Nelson-Jones, R., 1996, *Relating Skills*, London: Redwood Books;

Niculescu, Rodica, M., 2000, *Teacher Training*, All Press, Bucharest;

Niculescu, Rodica, M., 2001, *Initial Psychological, Pedagogical and Methodical Teacher Training*, Transylvania University Press, Brasov;

*An Homage to Professor Miron Ionescu. Studies and Reflections about Education*, 2003, Cluj University Press, Cluj-Napoca;

Paquai, Leopold, Altet, Marguerite, Charlier, A., Perrenoud, Ph., 1996, *Former des enseignants professionnels. Quelles strategies? Quelles competences?, Perspectives en education*, Paris/Bruxelles;

Palasan, Toader, 2003, *Pedagogical Fundaments for a New System of Initial Teacher Training*, in the Initial Teacher Training Doctorate thesis, Bucharest University;

Palasan, Toader, 2009, *Strategies for Teacher Training*, Bucharest University Press;

Paun, Emil, 1982, *Socio-pedagogy in the School*, Didactic and Pedagogical Press, Bucharest;

Paun, Emil, 1999, *School-A Socio-pedagogical Approach*, Polirom, Iasi;

Paun, Emil, 2002, *The Professionalizing of the Didactic Activity in Professional Standards for Didactical Profession*, M.E., Bucharest;

Paun, Emil, Potolea, D., (coordinator), 2002, *Pedagogy. Theoretical Fundaments and Applicative Steps*, Polirom, Iasi;

Panisoara, Ion, O., 2001, *Modern Methods of Educational Interaction*, in Cerghit, I., *Pedagogical Discourses*, Polirom, Iasi;

Panisoara, Ion, O., 2009, *The Successful Teacher. 59 Principles for Pedagogical Practice*, Polirom, Iasi;

Planchard, Emile, 1992, *Contemporary Educational Pedagogy*, Didactic and Pedagogical Press, Bucharest;

Popa, Ioan, D., 2002, *The Efficient Teacher*, Al. I. Cuza University Press, Iasi;

Potolea, Dan, 1989, *The Teacher and Leadership Strategies for Learning*, in *Learning Structures, Strategies and Performances*, Academy Press, Bucharest;

Potolea, Dan, Neacsu, I., Iucu, R.B., Panisoara, I.O. (coordinator), 2008, *Psycho-pedagogical Training. Handbook for the different teacher tests*. Polirom, Iasi;

Radu, Ioan (coordinator), 1993, *Psycho-pedagogical Methodology and Data Analysis*, Sincron, Cluj-Napoca;

Rateau, Paul, 2004, *Experimental Methods and Statistics*, Polirom, Iasi;

The Report of the Presidential Committee for the Analysis and Development of Policies in Education and Research, *Educational Romania-Research Romania*, 2007, Bucharest;

Radulescu, St. Mihaela, 2006, *The Methodology of Scientific Research*, Didactic and Pedagogical Press, Bucharest;

Remmers, H. Hermann and Gage L. Nathaniel, 1995, *Educational Measurement and Evaluation*, Harper, New-York;

Rotariu, Traian, But, P., 1997, *Sociological Investigation and the Opinion Poll. Theory and Practice*, Polirom, Iasi;

Salade, Dumitru, 1990, *Competence, Performance, Competition*, in *Pedagogy magazine nr.1*;

Sarason, Seymour, B., 1999, *Teaching as a Performing Art*, Teachers College Press, New-York;

Sava, F., 2004, *Data Analysis in Psychological Research. Complementary Statistical Methods*, ASCR Press, Cluj-Napoca;

Siebert, Horst, 2001, *Constructivist Pedagogy*, European Institute Press, Iasi;

Singer, Mihaela, Sarivan, Ligia, 2006, *Quo Vadis, Academia? Guidelines for a Strong Reform in Higher Education*, Sigma Press, Bucharest;

Singly, Francois, Blanchet A., Gotman A., Kaufmann J.C., 1998, *The Investigation and Its Methods. The Questionnaire, the Data Producing Interview and the Comprehensive Interview*, Polirom, Iasi;

Solso, Robert L., Johnson, H.H., 1989, *An Introduction to Experimental Design. A Case Approach*, New York, Grand Rapids, etc.: Harper and Row Publishers.

Stan, Emil, 2004, *Postmodern Pedagogy*, European Institute Press, Iasi;

START, 2001, *Aid, Training and Assistance for Resident Teachers*, British Council, Bucharest;

Stone, Raymond, J., 2005, *Human Resource Management*, John, Wiley and Sons Ltd. Chapter 1;

Taspinar, Mehmet, 2007, *The Cooperative Learning Method In Teacher Training*, in the International Journal of Educational Reform 16;

Van Dalen, Meyer, 1996, *Understanding Educational Research*, McGraw Hill, New-York;

Vial, Michel, 1997, *L'Auto-Evaluation entre auto-control et auto-questionnement*, Universite de Provence, Departament pour les sciences de l'education;

Vlasceanu, Lazar, 1982, *Sociological Research Methodology*, Scientific and Encyclopedic Press, Bucharest;

Vlasceanu, Lazar, Jinga I., 1989, *Learning Structures, Strategies and Performances*, Academy Press, Bucharest;

Vlasceanu, Lazar (coordinator), 2002, *School at the crossroads-Change and Continuity in Mandatory Education Curriculum*, Polirom, Iasi;

Voiculescu, Florea, 1993, *L'instruction scolaire-entre la psychology de l'apprentissage et la technologie didactique*, Babes-Bolyai Studia, Psychologia-Paedagogia, XXXVIII, 1-2;

Voiculescu, Florea, 2000, *Educational Resources Analysis as a Measure of Pedagogical Planning*, in Pedagogical Studies, Homage to Professor Dumitru Salade, Cluj University Press, Cluj-Napoca;

Voiculescu, Florea, 2004, *Resources-Needs Analysis and the Strategic Management in Education*, Aramis Press, Bucharest;

Zay, Danielle (sous la direction), 1994, *La formation des enseignants au partenariat. Un reponse a la demande sociale?*, Presses Universitaires de France, Paris;

### Web Sources

<http://www.xenos.org/classes/papers/postmoedu.htm>\*\*\***Comparing** Modernist and Postmodern Educational Theory;

<http://www.bologna.ro/index>, Education with a focus on the student;

<http://www.eric.ed.gov>> Education Resources Information Center;

<http://www.edu.ro>

<http://www.isd.uga.edu/teachingresources/resources/char.html>, Center for Teaching and Learning (Workshop). Characteristics of a Good Teacher. Retrieved February 7, 2006;

<http://www.ise.ro>, consulted on 12.02.2007;

<http://www.cnrop.ise.ro/resurse/capp/regcap.pdf>, consulted on 04.25.2008;

<http://euroguidance.ise.ro>, consulted on 05.18.2008;

<http://www.cnrop.ise.ro/resurse/capp/reg2005.pdf>, consulted on 05.18.2008;

<http://www.cnrop.ise.ro/Pub/sanosp.htm>, consulted on 05.18.2008;

<http://ec.europa.eu/education/policies/lll/llen.html>, consulted on 08.30.2008;  
<http://www.counseling.org/site/PageServer?pagename=resourcesethics> (American Counseling Association-ACA), consulted on 10.25.2008;  
<http://www.uned.es/aeop/index0.htm> (Qualification Standards for Educational Guidance and Career Service Providers IAEVG), consulted on 05.12.2008;  
<http://ec.europa.eu/education/policies/educ/eqf> (European Qualifications Framework-EQF, European Committee working document-957/2005), consulted on 05.10.2008;  
<http://www.eurydice.org> Eurydice Network, consulted on 02.10.2008;