

**BABES - BOLYAI UNIVERSITY
FACULTY OF PSYCHOLOGY AND EDUCATIONAL SCIENCE
DOCTORAL SCHOOL "EDUCATION, DEVELOPMENT, COGNITION"**

PhD THESIS

SUMMARY

**Scientific Coordinator
PROFESSOR MIRON IONESCU PhD**

**PhD Candidate
ALDESCU (married BALAŞ) CORNELIA EVELINA**

**CLUJ-NAPOCA
2010**

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***STUDENT'S INITIAL TRAINING FOR THE
DIDACTIC PROFESSION***

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STUDENT'S INITIAL TRAINING FOR THE DIDACTIC PROFESSION

Resume

KEY WORDS:

University, education, teacher, reform, the Bologna Treaty, the European Union, professionalization, student, initial psycho-pedagogical training, teaching practice, competence, methodological competences, focus-group, questionnaire, assessment phase, Autoscopia, simulation, role play, formative experiment.

The PhD thesis **Student's initial training for the didactic profession** is based on the consideration that a prerequisite for a valuable and effective education is the existence of a well-trained teachers' corps, with reference both to specialized training and to psycho-pedagogical and methodical training, expectations from the teachers being much higher. Initial and continuing training must consider equipping the teachers with the necessary skills so they feel comfortable in front of the class, in all situations that may arise in the course of their teaching activity. They must be experts in one or more specialized disciplines, requiring a high level of academic qualification. Teachers have an increasingly complex mission, their responsibilities are growing, and the environments in which they work are becoming more difficult.

Chapter I *HIGHER EDUCATION TODAY* focuses on the main phenomenon that marks the evolution of higher education at European level in recent years, namely the Bologna process. In our approach to analyze the initial training of teachers, we found it necessary to start from stressing out the changes in the Romanian higher education since the 1989 Revolution, focusing on the last stage of reform - the implementation of the Bologna system – and, as a result, the currently initial teacher training being done exclusively in the university system.

Particularly in Romania, debates and studies on higher education show that important current issues include the funding mechanisms, the preparation of the graduates to join as teachers in higher education, the ethics in higher education, the quality of education and the development of private education. Romanian higher education reform focuses mainly on the implementation of objectives set by the "Bologna Declaration, on the European Higher Education Area", and the implementation of the Lisbon Convention (proposed jointly by UNESCO and the European Council in 2000), regarding the European recognition of qualifications. Within the Bologna process, the Romanian higher education has been going through a major transformation since the 2005-2006 academic year.

So far, Romania has taken important steps towards the European Higher Education Area by reorganizing the entire spectrum of university programs. All academic programs have been restructured in accordance with the Bologna process. The first cycle has been currently implemented in the 2005-2006 academic year, the previous programs of the first cycle (long-term and short-term university studies) have been replaced gradually by Bachelor programs, so that in 2008 all have been Bachelor-type. The new structure of Romanian higher education provides full access to students from first cycle (bachelor) in the second (master) and from the second to the third.

The restructuring of the Romanian higher education on 3 main cycles of studies is based on the reorganization of the program content, by identifying and

defining the general knowledge, skills and specific professional abilities, in order to meet labour market needs. Universities are in the process of reforming their curricula to ensure a student-centered education.

In Chapter II *TEACHERS PROFESSIONALISATION*, we shift our attention to current debates on teaching profession, which are focusing more and more on the acknowledged reality that the profession is changing due to developments in contemporary society, and due to increasingly complex challenges faced by the education system. Accordingly, we found it necessary to answer a few questions raised by the researchers in this the field: What skills should teachers have in a constantly evolving and changing society? What should teachers "know" and "know how to do"? How should they be trained to practice this profession? What types of theoretical, methodological, actional and vocational skills teachers need to achieve? What are the most appropriate and effective initial training programs for teaching staff? Etc.

The answer to those questions can only be "professionalizing teaching career" and particularly developing the "professiogramme" of this profession, a rather difficult task if we consider the specifics of the educational activity. We considered useful to analyse aspect such as professionalization, being realized based on the standard educational function, standards which in turn indicate general and specific skills and abilities needed to carry out teaching profession.

The professionalization of the teaching career is based on an inventory of professional standards. *The development and training of teachers and managers of pre-university education strategy* prepared by the Ministry of Education and Research provides the first objective the *professionalizing teaching career* in Romania. In the related literature professionalizing teaching activity means that this "does not reduce it to the systematic assimilation of skills described by professional standards, but requires a heuristic and creative use of these skills in educational and context situations", adding alongside knowledge and professional skills the "schemes of thought, interpretation, hypothesis creation, anticipation, decision-making" (E. Paun, 2002, p. 22). Professionalizing teaching career is possible as long as the professional standards are supplemented by *personal qualities and vocation of the teacher*.

In 2001, the National Council for Teacher Training initiated an approach to develop a system of standards for the teaching profession. It started with the idea that education had been for too long dominated by improvisation and empiricism, hoping that the development of these standards would ensure the right of the future teachers to have access to the best training in specialized institutions. So, standards for teaching profession were developed, in response to the question "what should a teacher know and know to do?" The teaching profession standards are based on five core principles expressing the current view on the content of the teaching profession qualities and on the qualities of a good teacher. These core principles are:

1. The teachers *have a good knowledge on the field and didactics of the discipline they teach.*
2. The teacher *knows the student and assists him/her in their development.*
3. The teacher is *an active member of the community.*
4. The teacher has *a reflective attitude.*
5. The teacher is *a promoter of a value system* consistent with the educational ideal and is responsible for controlling and monitoring student learning activities.

Also in Chapter II we shift our attention towards the skills needed by a future teacher, starting from the many definitions that didactical or pedagogical competence bears in literature.

The Ministry of Education and Research, in collaboration with the Institute of Education Sciences and National Center for Teacher Development and Training have developed an "**inventory**" of skills necessary for the teaching profession, structured on several levels: a) basic skills; b) specialist skills; c) psycho-pedagogical and methodological skills; d) psycho-relational skills.

Therefore, the initial training of teachers aims at two complementary aspects: acquiring specialized skills (assimilation of knowledge in a particular field, orientation in this particular field) and psycho-pedagogical and methodological skills.

Highlighting the changes in higher education imposed by signing the Bologna Declaration and taking into account that the Romanian system of education is, since the 1st of January 2007, a part of what is called the European system of education, in Chapter III *TEACHERS INITIAL TRAINING FROM EUROPEAN UNION PERSPECTIVE* we have considered that it would be of real interest to conduct a comparative analysis of initial teacher training systems in Member States of the European Union. This analysis was conducted in order to highlight the characteristics and peculiarities of the initial teacher training in the European context and to identify the place occupied by the Romanian system in the larger picture provided by the general development directions, of what, after the adoption of the Bologna Convention, we name, the European system of education. We also wanted to highlight the fact that improving the quality of teacher training is an important objective of all the European education systems.

At a European Union level, two **main lines of action** are emerging, which are also the target of much discussion and controversy. The first part is based on developments and changes in the initial and continuous preparation and training of teachers in the context of the new millennium education. The second part revolves around increasing the attractiveness of the teaching profession in general. The analysis of education systems in the European Union showed that most states are in a period of intense transformations, all aimed at implementing the Bologna system. They try to ease the transition to the new system and it is clear that efforts have been made to implement the three-cycle system.

Understanding that the education system in our country, after the integration of Romania into the European Union, can not be treated in isolation but in relation to different directions imposed by European regulations, we have examined the educational systems of other Member States, noting the positive and also the negative developments. The recognized and declared trend for all decision makers within European institutions is to implement in the near future a unified system based on a number of generally accepted principles by EU governments.

We hoped that an analysis of problems and solutions founded by other education systems would lead to a crystallization of the directions the Romanian educational system must follow. We found, however, that our expectations were perhaps too optimistic, in present being still far too soon to talk of an integrated European system of education.

In fact we realized that an analysis of European education would not be complete if we limit this study only to the Member States of the European Union. Geographical Europe includes a number of state entities whose school systems have particularities, difficulties, advantages that would be useful to be stated and known. We speak here of the new states arising from the dissolution of Yugoslavia, Albania, a state often forgotten in European politics, independent states resulted from the dismantling in 1991 of the former Soviet Union or another state with unique characteristics, Turkey. So we headed out to analyze the systems of initial training of teachers in these countries as well.

Continuing our approach to analyze the systems of initial training of teachers in other states, we have directed our attention to some of them as case studies. Thus, we chose to scrutiny in detail the initial system of teacher training in France because of both its

merits against the rest of the education systems and for the interesting parallels that can be made with the Romanian national system, being also exciting to historically track, since and until what period in time our schools have managed to keep up with one of the most advanced Western systems.

We have also chosen to perform a case study on the Luxembourg given the peculiarities of her system of teacher education. It is a unique example of using the educational Community cooperation. And this because Luxembourg can only provide training for teachers in preschool and primary education, for secondary and higher education teachers, this state being dependant on theoretical teachers training abroad.

Choosing Serbia for developing a case study in this study alongside with France and Luxembourg is motivated by practical considerations. Relating only to a strong educational system, in this case France, is not always able to offer us a true picture of our own national system. Serbia, on the other hand is a state marked by economical, political, and social difficulties, perhaps more serious than those faced and facing Romania. It is a necessary exercise in our opinion to try to relate to a state with an emerging education system after a long crisis, in order to analyze "hot" concrete measures for re-launching education.

The purpose of case studies that we conducted was not primarily the discovery of strengths, or weaknesses of some educational systems, but finding solutions for improvement and development which are most suitable to apply our own system. In this sense, maybe a single example is enlightening. At the time that France faced difficulties in upgrading the education system a few decades ago there wasn't an option for a strategy based largely on external funding, there was no political framework to allow such measures. Currently both Serbia and Romania are able to access important external resources from European and international institutions and sheer efficiency in the use of these funds being crucial to the success of reform in education.

In Chapter IV *THE INITIAL TRAINING SYSTEM FOR THE ROMANIAN TEACHERS*, we focus our attention to the particularities of the Romanian system of initial training of teachers. We start with a brief historical perspective on this system, then continuing with the presentation of *development strategy for the system of initial and continuing training of teaching staff and managers in higher education*. Developed in 2001 by the Ministry of Education and Research, this national strategy for improving education and training for teachers sets goals and priorities aligned with the reform measures agreed at European Union level in this field (specifically those contained by the European Program "Education and Training 2010").

The strategy proposes a number of major objectives, and with regard specifically to the initial preparation of teachers, it establishes concrete measures on priority areas to be applied on short, medium and long term. We name just a few of them: the design and implementation of national standards for the teaching profession, the establishment of national curricular standards for both DPPD and the Pedagogical Faculties, transferable credits system implementation in the initial training of teachers, introduction of specialist modules in ICT and computer assisted initial training curriculum, establishing postgraduate training institutions for teachers (IUFM type institution), extending the route of initial training of teachers until graduation of post-internship exam (practical training, assisted by mentor and methodician), introducing a comprehensive assessment system for the teacher diploma (at the end of initial training process) by: professional portfolio, "pedagogical journal"; written exam; diploma paper (of psycho-pedagogical and methodical content); change funding methodology for teaching practice activities and mentoring; developing a permanent network of application institutions (schools and kindergartens) for teaching practice through bilateral agreements between institutions of

higher education and county school inspectorates; diversification of partnership relations with services institutions for alternative pedagogical practice (counseling centers, children's clubs, media, speech therapy centers, NGOs, etc.).

As in many other European countries, initial teacher training in Romania is mainly based on a concurrent model: theoretical and practical training for the teaching profession is carried out simultaneously by training in a specific field of study or through general training classes.

At present, training teaching staff for a didactic career in secondary education is provided by specialized structures within universities, with specific responsibilities for initial and continuing training of teachers (**Training Departments for Teachers - DPPD**).

Initial teachers training is a strict actual matter nowadays as we are in the middle of reorganization process for universities in the country for compatibility with systems of higher education in other EU countries. This reorganization has an effective impact on the Training Departments for Teachers, the institutions empowered to prepare students for future teaching career. It is the time of initiating the curriculum change for the psycho-pedagogical module and also for the general programs curricula, credit system is introduced to classes within this module and changes are made in the distribution of disciplines over the years of study.

Initial training activities conducted by the Training Departments for Teachers are based on the Minister of Education and Research Order approving the program to obtain the certificate of graduation of the Training Departments for Teachers, no. 4316 from 3 May 2008.

Thus, for enlisting as a teacher in secondary education the candidate should attend the program for a certificate of graduation of Training Departments for Teachers, as follows: **first module** attended during the Bachelor's degree classes, with accumulation of 30 credits and obtaining a preliminary graduation certificates (which provides partial certification for teaching profession and give the right to exercise temporary teaching profession until permanently appointed).

For additional psycho-pedagogical training, the **second module** should be attended after obtaining the bachelor's degree – consecutive model - and before the permanent appointment exam, the accumulation of an additional 30 credits is needed and also gives the certificate of graduation, which replaces the preliminary certificate of graduation.

In the case of the Bachelor's degree with dual specialization, the minimum number of credits required to obtain level I certification for teaching profession is 35 credits. This resulted from the addition of 5 credits for the didactics of the second specialization. These 5 credits do not accumulate in the package of 60 credits corresponding to level II certification.

Chapter V *PEDAGOGICAL PRACTICE - A BRIDGE BETWEEN THEORETICAL AND PRACTICAL TRAINING* addresses the issue of teaching practice, with emphasis on the need to redefine the theoretical and practical balance within the initial teachers training. Shifting the focus in training on teaching practice and especially on changing the way it is organized and conducted, is likely to allow the student to discover their own style of practice and develop skills to find independent and creative solutions to issues that may arise in this profession.

Teaching practice is included in the DPPD curriculum as a compulsory course having assigned a number: **78 hours for level I** (3 hours / week x 14 weeks - for teaching practice I, and 3 hours / week x 12 weeks - for teaching practice II respectively) and **42 hours for level II** (3 hours / week x 14 weeks) for both levels being granted a number of 5 credits.

Teaching practice of students is conducted in schools on the application, set by school inspectorates in cooperation with higher education institutions, according to the needs of initial training for the teaching career.

Pedagogical practice's goals are: teaching students the ability to work with information from specialized disciplines and from the field of education sciences; training students in the use of framework plans, programs and schools textbooks; enabling students to develop skills to use specialized materials; initiating students to the technique of laboratory or cabinet classes; the acquisition of skills by students for the teaching profession. Acquiring psycho-pedagogical skills, mastering technology and teaching methodology, so that the professor teaching behavior is one factor in higher performance for students, is also part of the initial pedagogical training. Of course, teaching practice for students can not be reduced to developing, supporting and reviewing lessons. It must be an opportunity and a framework to implement all the theoretical knowledge acquired in the psycho-pedagogical disciplines.

In this field of work, in many published studies frequent questions arise such: **What skills are needed in teaching, in order for student activities to include an ever upward curve?** We present below (see Table. 1) a picture of general and specific skills necessary to conduct educational activities developed by the Ministry of Education, according to the standards for teaching staff:

Table No. 1. General and specific skills – teacher

GENERAL SKILLS	SPECIFIC SKILLS
I. Applying optimal algorithms in the design, organization and evaluation of educational activities	<ul style="list-style-type: none"> • Appropriate use of knowledge: the general and the specialty didactics, psychology; • Design and evaluation of the educational content; • Adequate organization of the educational activities appropriate to the type of dominant lesson; • Optimal use of space-time factors, for efficient training process • Adopting teaching strategies that allow efficient use of resources and teaching aids in the educational process.
II. Implementation of teaching / pedagogical / educational communication strategy	<ul style="list-style-type: none"> • Mastering the modern concepts and theories of communication: horizontal / vertical, complex, total (ectosemantic) multiple, diverse and specific; • Documentation and updated information from different classical and modern sources; • Design, management and implementation of training process, as an act of communication; • Ability to diagnose family's expectations and interests.
III. Development, consolidation and improvement of general, thinking and motric skills	<ul style="list-style-type: none"> • Mastering the modern concepts and theories on the formation of "schemes of action" and knowledge capacity; • Selection of optimal methods for training critical thinking and practical skills; • Selection of optimal methods for training technical thinking and developing the aesthetic sense; • Manifestation of an innovative psycho-pedagogical conduct on a professional / social level.
IV. Stimulating creativity and formative learning type	

V. Mastering the techniques of skills transfer in extracurricular and school activities	<ul style="list-style-type: none"> • Understanding the formation mechanism of psycho-morale features and adoption of methods and techniques of knowledge and pupils stir ups;
VI. Applying the techniques of knowledge of socio-educational problems in advising, orientation / socio-psycho-pedagogical integration of students	<ul style="list-style-type: none"> • Designing and organizing educational and instructional activities in collaboration with the community; • Answering for the assumed social role; • Developing effective strategies of school-family partnership; • Formation of professional attitudes; • Knowledge of the dynamics and trends in the labor market.
VII. The acquisition of psychological mechanisms to achieve self-control and behavioral balance in all educational situations	<ul style="list-style-type: none"> • Using methods and techniques of psycho-behavioral self-control; • Adopting an effective behavior to overcome "the limit situations"; • Manifesting a (self)reflective conduct; • Training students' skills to allow them to devise an effective action plan in preparation of exams, competitions, contests, etc. • Opening to the changes taking place in competition, examination, contest situations; • Making full committment in the different docimological roles (examiner / examined / competitor / supervisor, etc.).
VIII. Harnessing the professional development opportunities in a transitional socio-professional environment	<ul style="list-style-type: none"> • Manifestation of (self) reflection conduct on own teaching/pedagogical activities ; • Openness to innovative trends necessary for professional development

Starting from the theory presented, we conducted a constatative study (using the focus-group and the survey by questionnaire) to reveal the perceptions of both students and teaching practice mentors on the organization and conduct of this activity, and to identify the level of psycho-pedagogical theoretical knowledge and methodological skills necessary for students to conduct practice teaching. The study was followed by a formative experiment, accompanied by the posttest and the retest in order to measure the over time persistence of results.

Chapter VI *CONSTATATIVE EXPERIMENTAL DATA ON THE LEVEL OF KNOWLEDGE AND METHODOLOGICAL SKILLS OF STUDENTS* describes and analyzes the survey results ascertaining the theme: ***Optimizing methodological skills training during teaching practice activities.***

We started our experimental approach from the uncontested fact that teaching practice is very important in the initial psycho-pedagogical training, but **it is organized and carried out insufficiently and, often, ineffectively**. The process of improving teaching practice should be based on setting clear targets that this form of training has to achieve. In other words, we must ask how we want the future teacher to look like after completing the practice training stage.

As it is well known, on the one hand the number of hours allocated to this discipline was reduced from four hours per week to three hours a week (as OM no. 4316 /

3 June 2008), resulting in a total number of 78 hours for level I and 42 hours for level II. We believe that this number of hours of teaching practice activity is insufficient for initial psycho-pedagogical training for the future teacher, but simply allocating additional hours for teaching practice may likely not contribute substantially to increasing the practical training of the student. With no "power" to change this situation, we shifted our attention towards optimizing the performance and conduct of teaching practice. Besides the increase in the number of allocated hours, some measures should be taken to increase the quality of the teaching practice.

On the other hand, the teaching practice for students still follows an imitative model, the student attending and observing the mentor's behavior, behavior that he/she tries to reproduce when he/she is placed in actual teaching situations. We believe that our intervention at this time is appropriate, encouraging the student to build and to develop personal qualities during the teaching practice period, to critically and constructively examine the behavior of the assisted mentor, to develop security and confidence in their psycho-pedagogical abilities.

We tried through the proposed experiment to more or less change the perception of students on teaching practice, aiming "to attract" them through a series of innovative activities, in order to capture their attention and interest.

In the case of the "**Student's initial training for the didactic profession**" research, the methodology was based on the experiment as the main method for stimulating the development of student's methodological skills for the teaching profession. Thus the formative experiment on **Optimization of the didactical and methodological skills development** during teaching practice activities, we intended to identify ways in which these skills can be formed more efficiently and sustainably, starting from the idea that didactic and methodical preparation is an essential component in the initial preparation of students for the teaching profession.

Thus, we proposed reaching the following objectives:

- O.1.** Identifying ways of developing professional teaching skills to college students taking an educational profile classes within the "Aurel Vlaicu" University "Aurel Vlaicu" (Training Department for Teachers).
- O.2.** Identifying the level of theoretical knowledge necessary to effectively conduct the teaching practice activity.
- O.3.** Highlighting aspects related to the development of a self-observation conduct in teaching practice.
- O.4.** Identifying the teaching practice mentors perceptions on the training needs of students and on the means of developing teaching practice;
- O.5.** Shaping the working hypotheses for conducting the formative experiment.

In carrying out the constative study the following sub-steps were covered:

Sub-phase I: Delimitation of the constative study ground, clear formulation of the problem to investigate and the problems of initial training system documentation, summarizing the state of knowledge and research on the topic addressed, in July 2007 - February 2008. This phase consisted in an essay preparation on "*Teachers initial training: essence, terminological clarifications, selective bibliography*" presented in March 2008.

Sub-phase II: Establishing the research objectives, identification and selection of research subjects, the identification, adoption/adaptation, development of data collection instruments: March-August 2008.

Sub-phase III: Methods and instruments application, data collection, pretest administration: October 2008

Sub-phase IV: Data processing and conclusion analysis: October 2008 - December 2008.

To highlight the students and teachers views on the organization and conduct of teaching practice, we used the focus-group method, as it's highlighting subject's thoughts, attitudes on the issues investigated and it's providing an understanding of differences in perspective between the various categories of persons or groups.

The focus-group interview guide was applied to students who have completed teaching practice for two semesters in the academic year 2007-2008. The semi-structured interview was meant to highlight the perception of students on teaching profession and to identify the views and feelings of students regarding the organization and conduct of the teaching practice. The interview guide contains 9 questions. The focus group variant was a one category project type. Students who participated in the focus-group numbered 55 and have completed teaching practice level I and II in the 2007-2008 academic year.

The focus-group interview guide for mentors includes open questions, seeking to identify the participant's views on mentoring the students during teaching practice. Number of questions that required an answer is 13, selected and clearly stated questions in advance. Pedagogical practice **mentors** who participated in the focus-group were 12 in number and are mentors in the schools of application recommended by the County School Inspectorate of Arad, mentors under whom guidance students from the "Aurel Vlaicu" University of Arad carry out teaching practice.

Another direction of the constatative study, with the purpose of a pretest, was establishing the existing level at the beginning of the pedagogical experiment at both the experimental and the control group, regarding the methodological skills necessary to conduct teaching practice; the existing level of theoretical knowledge before the start of teaching practice, as well as highlighting aspects of developing a self-observation conduct in teaching practice for future teachers.

The study recruited 280 students from the third year (**Level I**) from the "Aurel Vlaicu" University of Arad, students attending the classes of the Training Department for Teachers. Subjects were aged between 20 and 44 years. Distribution of participants depending on their specialties, depending on the compulsory or optional nature of their participation in the pedagogical module, is presented in Table. 2.

Table No. 2. Distribution of subjects included in the study according to the compulsory or optional nature of participation in pedagogical module and their specialties.

Participation in pedagogical module's courses	Faculty	Specialty	No.
Compulsory	HUMAN AND SOCIAL SCIENCES	History	13
		Romanian/English Languages	56
	SPORTS	SportS	39
	EDUCATIONAL SCIENCES	Special psycho-pedagogy	24
	THEOLOGY	Orthodox Pastoral Theology	25
		Orthodox Didactical Theology	30
	EXACT SCIENCES	Math-IT	27
Optional	ECONOMICAL SCIENCES	Economical sciences	27
	HUMAN AND SOCIAL SCIENCES	Public Administration	10
	ENGINEERING	Engineering	29

Total			280
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To identify the level of knowledge acquired by students after attending mandatory psycho-pedagogical disciplines (Educational Psychology, Introduction to pedagogy, Curriculum theory and methodology, Theory and methodology of instruction, Theory and methodology of evaluation, Specialty didactics), indispensable knowledge for achieving an effective teaching practice, we have built an assessment tool.

The assessment phase and its respective tool were built to include questions form all around the sphere of teaching approach: design, implementation and deployment. From a structural point of view the formulated items are an objective type items (items with dual choice / dichotomous, multiple choice items / answers of choice items, pair / association type items) and semi objective type items (short response items and completing items), application instructions being placed at the beginning of the phase.

The assessment tool includes a total of 30 items, which can be divided into five categories, as follows:

- The first category refers to theme of **teaching activity design**;
- The second category catches the problems regarding **educational goals**;
- The third category concerns with the issue of the forms of organizing the educational activities, focusing on the **lesson as the main form of didactic organization**;
- The fourth category contains items covering **teaching strategy issues**;
- The fifth category focuses on **the didactic evaluation** theme.

In order to identify the methodological skills formed until the start of teaching practice, we have built a questionnaire. The questionnaire distributed to students from the third year - Level I, from the Training Department for Teachers, contains 18 items both open and closed. As a structure, the constructed questionnaire has three dimensions, including several variables as:

Dimension A – *Self-evaluation/appreciation of the capacities formed after attending mandatory psycho-pedagogical disciplines.* In this section we have 7 items, the first three (open items) aimed to identify students' perceptions of the advantages and disadvantages of the teaching profession, and stating expectations from the teaching practice. The assessment of their psycho-pedagogical abilities is covered by items 4, 5, 6 and 14 (closed items). These items include variable, sub-categories (a. x) which address teaching activity as a whole.

Dimension B – *Self-evaluation/appreciation of personality traits involved in teaching behavior.* In this section six items may be assigned that aim at: identifying the extent to which the student features different aspects of personality, issues that concern both cognitive features and especially the relational features, in relation to themselves, to others and to work; behavior self-observation over a sequence of communication (including issues related to verbal, nonverbal and para-verbal behavior); identifying the extent to which students have been accustomed to observe their own behavior in different situations.

Dimension C - *The perception on the initial psycho-pedagogical training and on the assumed role of teacher* contains four items. This dimension seeks to highlight: the need for counseling, support, assistance in developing teaching skills; the intention to access a teaching career, possible "provocative" / difficult elements related to the teaching profession.

Following implementation of data collection instruments (the focus group, the assessment tool and the questionnaire) two types of data have been obtained: quantitative

and qualitative, depending on the type of questions. The analysis of the data was made separately, and then the results of these tests were complementary analyzed.

Following the quantitative and qualitative analysis of data obtained in constative/pre-experimental phase of the experiment undertaken, a number of **conclusions** emerged.

A part of the constative study was represented by the assessment phase of psycho-pedagogical knowledge. We found that most subjects achieved a performance close to average, and a very low or very high performance was obtained by a relative small number of subjects, a result somewhat predictable which can be improved by effective intervention. Regarding the correlation between self-assessment and actual assessment of knowledge we must note that from all self/assessed dimensions only self-assessed teaching capacity correlated significantly, in a positively manner with the knowledge performance obtained from the evaluation, which implies and indicates that students who self-assessed correctly also obtained rating above average in external evaluation..

Also regarding the data obtained from the assessment tool application we found out that:

- the performance of the test subjects in the evaluation phase is at an average level ($M = 13.58$), the distribution of results approaching the form of a Gaussian distribution;
- from further statistical analysis we find that the lowest score in the evaluation phase was obtained on thematic categories of: *organizational forms of students activities* (where $m = 0.29 / 40.7\%$ of subjects providing a single correct answer from the three possible), *teaching evaluation* (where $m = 0.37$ a significant number of subjects offering no correct answer, most of them - 31.4% respectively 33.6% offering one or two correct answers), followed by thematic category *educational goals* ($m = 0.44 /$, where 37.1% of subjects gave a single correct answer of the four possible);
- regarding the relationship between age and performance in the evaluation phase we found that the higher the age, the higher the performance ;
- we found a difference in the performance of subjects related to the compulsory or optional nature of the psycho-pedagogical course, subjects who opted for courses in DPPD obtaining a higher performance on assessment test;
- regarding the relationship between the performance in evaluation and the specialty of the subjects, we found that students with Physical Education and Sports ($M = 8.92$), Pastoral Orthodox Theology ($m = 11.04$), Orthodox Theology Teaching ($m = 11.43$), Engineering ($M = 14.2$) specializations had the lowest results.

The study also focused on the ability of interviewed students to design the teaching approach, this capacity being assessed from self-evaluation of respondents. Regarding data from the questionnaire applied to students the following results emerged:

- the subjects are willing to follow a teaching career, despite the numerous difficulties and disadvantages they perceived related to teaching profession, but also despite the slightly distorted perception of the benefits and drawbacks of teaching profession. This availability may be linked with a minimum knowledge and acceptance of teacher responsibility;
- there are apparently conflicting results regarding the confidence in their psycho-educational abilities, a part of the respondents showing an overconfidence in their abilities, although not confirmed by analysis, and another part recognizing a less confidence in the implementation of these capacities;
- there is also a students' reluctance in choosing and implementing innovative teaching-learning-assessment concepts and methods;

- students have a reduced capacity to solve a pedagogical problem that have not previously experienced or do not know any solution, not even a theoretical one, which shows a lack of creativity, which of course can be attributed to lack of experience in the field of teaching. Directly related to this issue a stress factor was also found, generated by the interaction with the class of students, and tendency to overcome delicate situations and pedagogical conflicts by an authoritarian behavior;
- a strong concern about the evaluation process can be evidenced, focusing on the inability to accept an evaluation from the students;
- availability from students to improve their development both through initial training and later on through continuous training;
- regarding the relation between dimension investigated and specialization of subjects, we found that students from the Faculty of Physical Education and Sports ($M = 3.45$), Pastoral Orthodox Theology ($m = 3.41$), Didactical Orthodox Theology ($m = 3.43$) considered themselves to have less developed capabilities required to design a practical teaching approach;
- similar results are found in the case of self-assessment / self-evaluation of the capacity to support a teaching approach, where the Engineer specialization ($m = 3.64$) shows the lowest average, followed by Orthodox Pastoral Theology specialization with $m = 3.76$.

The data resulted from the constative study revealed that majority of students who participated in the study, despite all the drawbacks, difficulties and hardships they recognize and anticipate related to the teaching profession, are still willing to follow this profession. Given this conclusion, we deem it our duty to ensure the necessary preconditions for a substantial and practical training of future teachers so that to the social and economic difficulties they face in the profession, not to be accompanied by the difficulties resulted from insufficient theoretical or practical training or accommodation with the school environment.

Trying to synthesize the conclusions drawn in the lines above, we stress that the certain shortcomings in preparing students can be grouped in three main components. First, there is an **insufficient understanding of psycho-pedagogical concepts**, resulting in a fear of students to apply certain teaching methods or activities that they do not understand in detail. Not surprisingly, we are referring here to new, modern methods of teaching, which brings us to the second part, strictly linked to the first, namely the **reluctance to the new**, resistance caused by an insufficient knowledge or understanding of what the organization, design and implementation of a teaching approach really means.

Finally, a third weakness to be found is the **overconfidence in their abilities**, which unfortunately is not justified and can have a negative effect on student performance in teaching practice. We are in a situation where students have the impression that they "know" all they need to effectively conduct this activity, but as they encounter the difficulties and particularities of the pedagogical practice, they suddenly realize that in fact they "do not know" everything they need "to know".

Following the application of investigative methods already described, the process of collection, processing and interpreting the data and drawing conclusions the formative experiment design was completed.

Chapter VII *MEANS TO DEVELOP METHODOLOGICAL COMPETENCES THROUGH PEDAGOGICAL PRACTICE – FORMATIVE EXPERIMENT* presents the design of the formative experiment we proposed.

The formative experiment' stages proposed are a natural extension of the sub-steps already taken in the constative / pre-experimental phase, between that and the formative stage being continuity and intrinsic complementarities. The experimental design we developed meant going through the next sub-stages:

- Sub-phase I – analysis of the results and findings from constative/pre-experimental experiment, reconfiguration of the experimental design - the development of new hypotheses, selection of new methods and tools, drafting and detailing the experimental plan - January 2009;
- Sub-phase II - establishing the sample of subjects (control group and experimental group), based on the results from the constative research on students' methodological skills training from the 280 subjects participating in the pretest, so that the sample subjects are given an equivalent characteristic chosen as the methodological skills and theoretical knowledge levels identified in the constative research certifying - January 2009;
- Sub-phase III **conducting the formative experiment**. In this stage the experimental samples were systematically and rigorously "involved" in the intervention program aimed to develop the methodological skills. Students were engaged in self-knowing activities, were stimulated to design, organize and self-assess their teaching activity that will take place during teaching practice, using methods and tools applied by teachers during seminars in the educational disciplines - February - May 2009;
- Sub-phase IV **post-experimental**, consisted of questionnaire administration to students, and also the docimological tool to both students from the experimental group and from the control group, in order to highlight the evident students' evolution, involution or stagnation in terms of methodological skills development and necessary knowledge to conduct educational activities, on the one hand in comparison with the constative experiment and on the other hand in terms of experimental and control groups - June 2009;
- Sub-phase V- analysis, processing and interpretation of data, comparison between sample groups regarding the pre-test and post-test moments- June-September 2009;
- Sub-phase VI **the retest** was conducted after a longer time interval in order to check the durability, the strength of students acquisitions, because it was intended to develop skills that involved a progression over time, strengthening them as a condition of using these skills in future teaching activities - October 2009 (we have to point out that students enrolled in the experimental group carried out their university training over four years of study);
- Sub-phase VII Developing the final conclusion of the research - November 2009;
In developing the formative experiment' goals and objectives we started from a few assumptions and considerations:
 - Teachers need to be open to change. The will to change is closely related to other qualities of the teacher such as: planning flexibility, independence in decision making, critical evaluation of teaching materials and the ability to change and develop the curriculum content effectively.
 - In organizing and implementing the teaching-learning process it is necessary to establish deep interpersonal relationship and to use detailed and interrelated methodological skills. **We have to state that, during the experimental study, we defined the methodological skills as the abilities needed to design the educational approach and the managerial competence of the educational process.** To ensure active involvement of students in learning, teachers must interact with them more than it is done usually during a traditional session of learning and teaching.

- To manage the teaching-learning process, teachers must think critically and independently, because they can no longer limit themselves strictly to teaching as described in the curriculum. They will have to decide both the form and content of learning.

Thus the purpose of our formative approach is to *determine epistemological and praxiological landmarks for methodological skills training for DPPD students through the teaching practice discipline.*

The findings resulted from the constative study led to ascertaining the following **objectives of the formative experiment:**

O.1. creating the facilitating educational context for the optimal methodological skills training within the discipline of teaching practice;

O.2. stressing the importance of the teaching practice by presenting the positive effects which it generates, including the ability to overcome stage fright (reducing stress) initially generated by contact with the class, in a controlled environment and under the supervision and with the support of a mentor;

O.3. increasing the availability to implement new elements and accepting criticism inherent with the application of innovative methods or concepts;

O.4. developing confidence in their psycho-pedagogical abilities.

Identifying the purpose and objectives of the formative experiment was followed by formulating the following hypothesis: *If, in the initial psycho-pedagogical training of the future teachers, we use methods such as autoscopia, role play, simulation, exercise, we will find enhanced levels of theoretical knowledge and methodological skills (design and conduct of the educational process).*

In selecting subjects for the formative experiment we used mainly the **findings from the constative research** aiming to provide equivalence between the control group and experimental group in terms of dimensions investigated. Subjects were selected from those who were included in constative research, the selection criteria being represented by membership to a particular study group.

Thus, from the total of 280 subjects included in the pre-experimental/constative study sample, from the specializations mentioned above (see Table 3.), 60 subjects were included in the control group and 60 subjects in the experimental group, using the technique of equivalent samples. To facilitate the management of the formative program subjects were divided according to the compulsory or optional nature of psycho-pedagogical module. Also note that students are in the third year, **level I** of pedagogical training I (level which prepares teachers for compulsory education).

Table No. 3. Distribution of subjects in the formative experiment stage

Participation in pedagogical module classes	Faculty	Specialization	Experimental Group	Control Group	No.
Mandatory	SPORTS	Sports	10	10	20
	THEOLOGY	Pastoral Orthodox Theology	10	10	20
		Didactical Orthodox Theology	15	15	30
Optional	ECONOMICAL SCIENCES	Economical sciences	10	10	20

	ENGINEERING	Engineering	15	15	30
Total			60	60	120
Percentage			50	50	100%

The disciplines, which formed the object of the sample content were: discipline *Teaching Practice* (in line with the curriculum of the Training Departments for Teachers at the "Aurel Vlaicu" University of Arad) as well as thematic areas from the psycho-pedagogical mandatory disciplines previously studied (Theory and methodology of instruction and assessment, Specialty' didactics), as: taxonomy of educational objectives: educational goals: ideal, purpose, objectives. Operationalization of the objectives of lessons within each subject areas; teaching strategy; criteria of choice for teaching methods, of organization patterns, of ways of assessment; teaching methodology, the system of teaching-learning methods, interactive learning, active learning methods, organization methods of educational activities, teaching design at the macro and micro level; evaluation methodology, traditional methods of assessment, assessment tools; types of items, conducting evaluation tests with semi-objective and objective items, alternative and complementary methods of assessment: Portfolio, project, self-evaluation, investigation, etc. With these chapters and topics we intended to achieve both the specific objectives for the above mentioned disciplines and also the objectives of the formative experiment.

The pedagogical intervention intended to optimize the process of acquiring methodological skills to students of the DPPD, future teachers, aims to develop specific skills for the learning activities presented in Table 4.:

Table No. 4. Specific skills and learning activities – pedagogical intervention

<u>GENERAL SKILLS:</u> TEACHING DESIGN THE MANAGEMENT OF EDUCATIVE PROCESSES			
SPECIFIC SKILLS	LEARNING ACTIVITIES	TEACHING METHODS	ASSESSMENT METHODS
Appropriate use of concepts and theories of education science (interdisciplinary approach, general and specialty didactics, psychology, education philosophy, education in the new "knowledge society")	<ul style="list-style-type: none"> ▪ Developing a dictionary/glossary containing at least 15 pedagogical terms ▪ Reflection exercise: "I as a teacher!" ▪ Building an abilities profile of the teacher 	Problematization Explanation Exercise	Systemic observation SWOT analysis
Application of modern concepts and theories on development of the knowledge capacity	<ul style="list-style-type: none"> ▪ Identifying the errors and "scholar" knowledge in the curricula and in the textbooks which are 	Problematization	SWOT analysis Inter-evaluation

	<p>meant to be didactically implemented</p> <ul style="list-style-type: none"> ▪ The development of variants of the same message in different forms 	Exercise „Traditional versus modern”	Systemic observation
Designing teaching contents	<ul style="list-style-type: none"> ▪ Design curricular activities at macro and micro level: <i>Annual project design,</i> <i>Design of an educational unit from the common mandatory body</i> <i>Design of an educational unit from CDS</i> <i>Lessons designs</i> ▪ Exercises of operationalizing the educational objectives ▪ Design and implementation of various lessons types. ▪ Analysis discussion on simulated lessons 	<p>Problematization</p> <p>Exercise</p> <p>Simulation</p> <p>Autoscopia</p>	<p>Systemic observation</p> <p>Self-assessment grid</p> <p>Self/reflection journal</p>
Proper organization of teaching activities by type of dominant lesson	<ul style="list-style-type: none"> ▪ Activities of analysis of the types of lessons / variants ▪ Simulation of sequences of lessons (different types and variants) ▪ The proposal of learning sequences using methods of organization of students activities(frontal, by group, individual) ▪ Design of different types of assessment instruments: common for all students, and specific; ▪ The development of sequences of intermediate exercises, such as to enable students to self-assess their progress 	<p>Explanation</p> <p>Simulation</p> <p>Simulation Autoscopia</p> <p>Exercise</p> <p>Exercise</p>	<p>Inter-evaluation</p> <p>Reflection journal</p> <p>Portfolio</p>

Using appropriate teaching methods and strategies for individual/group peculiarities, the purpose and type of lesson	<ul style="list-style-type: none"> ▪ The development of variants which take into account the individual differences ▪ Exercising identification of strategies to boost student motivation ▪ Devising the management of students activities based of their learning situation 	Role play „Who are our students?“ Debate Exercise „Creativity in teaching“	Inter-evaluation Systemic observation Reflection journal
Setting materials and teaching aids used in learning activities	<ul style="list-style-type: none"> ▪ Devising a personal teaching material, absolutely necessary in teaching a lesson/lessons in their respective specialty 	Modeling Exercise	Systemic observation
Carrying out educational activities	<ul style="list-style-type: none"> ▪ Browsing observation practice activities, actual practice ▪ Exercises for critical evaluation of their educational performance 	Practical test	Portfolio

During the 10 weeks of pedagogical intervention, i.e. teaching practice and complementary activities in which the formative experiment was conducted, various methods and instruments were used in the activities conducted with subjects from the experimental group (exercise, role play, autoscopia, simulation, etc.) in order to optimize and improve their methodological skills and level of psycho-pedagogical knowledge. Thus, students who enrolled in the experimental group, unlike the students enrolled in the control group, participated in activities in which these methods and tools have been used, either applied by the teacher or the by the students themselves.

Chapter VIII *ANALYSIS, PROCESSING AND INTERPRETATION OF EXPERIMENTAL DATA PROVIDED BY THE PRETEST, POSTTEST AND RETEST PHASES* presents data provided by the formative experiment.

Data processing was done in several stages. Thus, the first step was to examine the effectiveness of the intervention program by comparing the results of the experimental group and control group in the pretest and posttest phase. Then, to see if there is persistence over time of effects obtained for the experimental group, comparisons were made between the results of the posttest and retest phases.

The experiment started with the pretest stage and its purpose was to determine any differences between the two groups, the experimental and the control one. Analysis of pretest results allowed us to show that *between the experimental group and the control group there were no significant differences in any of the dimensions investigated*, so the formative experiment could start from the premises of equivalence between the two groups. The homogeneity of values between the two pretested groups is able to provide assurance that our later results in the posttest phase and retested phase will be relevant, any

differences detected in later stages can only be in our situation a result of the designed and implemented intervention.

At the end of formative intervention, the questionnaire and the assessment tool were applied again to subjects in both groups.

As noted, there were statistically significant differences between the performance of the control group and experimental group in the post-test stage.

Analyzing the post-test results on the assessment phase (see Table No. 5) we notice that although significant differences are found in all categories examined, we can easily see large variations, higher than one point for goals and teaching strategies, or in other words, on issues involving a higher level of abstraction from the subjects. We can thus conclude that the opening shown by students to such concepts and areas is the result of the implemented intervention.

Table No.5. Average values for the assessment phase during the posttest and retest stage

	teaching design	goals	lesson type	didactical strategies	didactical methodologies	class management	assessment	total
G₀ pretest	3,47	2,28	1,25	5,27	3,77	1,50	1,80	14,85
G₀ posttest	5,30	1,71	1,85	6,85	4,60	2,25	1,93	18,30
G_e pretest	3,75	1,92	1,30	5,17	3,73	1,43	1,42	14,28
G_e posttest	5,98	3,01	2,78	8,05	5,71	2,33	3,05	23,80

The posttest results show that the intervention succeeded in improving students' ability to objectively assess these issues (see Table No. 6). The most developed item is observed in the self-assessment of personality traits related to the control group ($t = -6.043$ at $p = .000$), followed by the self-evaluation of teaching abilities ($t = -3.283$ at $p = .001$).

Table No.6. Average values for the questionnaire dimensions during the posttest and retest stage

	self-evaluation of teaching abilities	self-evaluation of personality traits	perception on psycho-pedagogical training
G₀ pretest	3,44	3,77	2,35
G₀ posttest	3,39	3,50	2,43
G_e pretest	3,40	3,76	2,35
G_e posttest	3,66	3,94	2,56

Thus, based on information provided by comparisons between experimental and control group in pretest and posttest, and by comparisons between the results of pretest and posttest for both groups, *there are significant differences in the posttest between the experimental group and control group* and these differences are not the result of the natural evolution of the group.

This means that, during the initial psycho-pedagogical training, preparing students in different activities and the use of specific strategies (methods, instruments, forms of organization) has resulted in increased theoretical psycho-pedagogical knowledge as well as methodological skills improvement (teaching design, class management).

The success of the intervention is also revealed by the re-test results. One indicator of a successful intervention is the consistency of the positive results. What could be found by analyzing the values obtained at this stage (see Table No. 7), is that generally not only that the progress noted in the posttest stage remained constant, but rather the performance of students in the experimental group continued to improve even after intervention was completed.

Table No.7. Average values for the assessment phase and questionnaire's dimensions for the experimental group (posttest-retest)

	teaching design	goals	lesson type	didactical strategies	assessment	total	self-evaluation of teaching abilities	self-evaluation of personality traits	perception on psycho-pedagogical training
posttest	5,98	3,01	2,78	8,05	3,05	23,80	3,40	3,76	2,35
retest	6,17	3,12	3,10	8,40	3,15	34,28	3,44	3,67	2,59

Re-test results are confirmed by the results obtained by applying the Q-sort instrument, following the interpretation of the results we can observe that the subjects have hierarchically arranged in a somewhat predictable manner the dimensions of the Q-sort technique, "feeling" that they had *a better management of educational activities, the roles which they can take in the educational process and personal qualities "required" for a teacher*. They are less attached to the *teaching design* probably considering it a cumbersome, difficult task.

Given the results presented, we also noted that:

- there are *significant differences* in the experimental group at a significance threshold $p < .05$ or $p < .01$ for *all dependent variables* within the formative experiment (performance obtained from docimological phase, with all dimensions covered; self-evaluation/self-assessment of the teaching abilities formed through psycho-pedagogical mandatory disciplines; self-evaluation/self-assessment of the personality traits involved in teaching behavior; perception on initial psycho-pedagogical training and on the assumed role of a teacher), while in the case of the control group there are significant differences between pretest and posttest only in terms of one dependent variable - perception on initial psycho-pedagogical training,
- in the re-test phase, in the case of the experimental group, it is found that the results of the posttest are maintained;

We conclude that the hypothesis "If, in the initial psycho-pedagogical training of the future teachers, we use methods such as autoscopia, role play, simulation, exercise, we will find enhanced levels of theoretical knowledge and methodological skills (design and conduct of the educational process)" is valid and the intervention program was effective.

Conclusions

To achieve a high level of performance and efficiency in its complex activity, the teacher has to develop during the initial psycho-pedagogical training a wide range of skills to harmonize with any real pedagogical situation. In this respect, a responsible and effective teacher can not fall below the required professional standards in this field.

The purpose of teaching at the current moment, is to train skills, which, in turn, will generate value and performance.

The future teachers are exposed to multiple influences, in turn influencing others. How they manifest themselves and interacts with others identifies and positions them in a specific framework that would attract students and make them more responsible in activities that take place. This is achieved through an appropriate teaching content, scientifically sound and presented in accordance with the objectives and tasks proposed.

Following the research we have undertaken with the purpose of optimizing the training of the methodological skills of future teachers, through the activities of teaching practice, through the analysis and assessment tools of student's work and through the results obtained by implementing these tools, it is necessary to develop a generalization of the data obtained in a direction beneficial to the educational process of Educational Science Faculties.

We present below (see Table No. 8.) **an inventory of didactical skills and abilities formed from through the experimental approach taken**, in the case of the subjects included in the experimental group:

Table No.8. Didactical skills and abilities formed through the formative experiment

Designing the educational process
<ul style="list-style-type: none"> ▪ ability to achieve cognitive, affective and motric goals ▪ ability to operationalize a benchmark ▪ ability to develop an accessible content ▪ ability to use active-participative methods ▪ ability to choose methods consistent to the objectives and contents set ▪ ability to use conversation methods ▪ ability to use the learning through discovery methods ▪ ability to use various didactical aids ▪ ability to manufacture teaching means ▪ ability to use audio-video tools ▪ ability to use IT equipment ▪ ability to design individual work activities ▪ ability to organize frontal work activities ▪ ability to choose appropriate assessment methods ▪ ability to develop an assessment test ▪ ability to design learning sequences according to the available time
Managing the educational process
<ul style="list-style-type: none"> ▪ clear and attractive communication of the activity's objectives ▪ discussing objectives with the students ▪ using designed methods ▪ organizing the class in frontal activities ▪ explaining different phenomena, processes, principles, concepts ▪ asking helpful questions ▪ offering clarifying examples ▪ involving students in activities that require their own learning effort ▪ stimulating students through open questions ▪ encouraging students through positive feedback
Roles adopted in relation with the students
<ul style="list-style-type: none"> ▪ emitter of educational messages ▪ receiver of educational messages ▪ facilitator in tasks solving ▪ evaluator of students performance
Personal aspects
<ul style="list-style-type: none"> ▪ observing own behavior ▪ logical thinking ▪ the pleasure to work with students ▪ empathy with students problems ▪ stress resistance

One of the purposes of this study, as can be seen still right from in title, was to identify the effects of the proposed intervention on initial training of students for the

teaching career. The findings of this study reveal a positive impact of the measures implemented in the experimental stage on future teachers training, and the effects can be grouped into three categories.

First of all, from the comparative analysis between the control and the experimental groups, it is noted that the *level of didactical skills for the students who participated in this study is clearly superior to that observed in the control group*. We can thus say that the students who received the intervention had a solid training level and thus benefit from a clear advantage during the initial preparation for the teaching profession.

A second issue noted concerns with the accelerated pace of acquiring new skills. In addition to the high level of knowledge gained by students who have participated in the experimental group compared to the control group, we also noted a decrease in the time required to assimilate new information. We appreciate that this effect is the result of applying new teaching methods during intervention which, besides being more effective than the traditional ones, have yet another effect, namely that they have a stronger attractiveness to students, which determines them to lean more and with more interest on their psycho-pedagogical training.

Finally, it should be noted that besides the two effects described above, the re-test phase also confirms another effect of the intervention on the initial preparation of students i.e. the consistency of the initial level of training. Thus, the constant level of teaching skills in the finalizing stages of the intervention was kept high in the case of the experimental group subjects over a long period of time, this being confirmed by the results of the re-test phase. Also the accelerated pace of the assimilation of new skills identified above was retained after completion of the experiment, or even more, has shown, in some cases, a continued increase subsequent to the experimental stage. This effect is also the result of enhancing the attractiveness of initial teachers training by introducing new, innovative methods in order to get the student directly involved in its training and enable him to personally realize the practical value of his theoretical training.

Possible solutions for improving the pedagogical practice organization and conduct

Unfortunately there is no "general and proper prescription" for the initial training of teachers, this having to be capable to adapt to any changes in the evolution of society. Only in this way we can hope that future teachers will be able to successfully cope with situations they will face in their future careers.

The background situation regarding the analyzed teaching tools, the curriculum / academic programs is marked by some shortcomings and failures, of which some may be reported:

- insufficient instruments available to students (observation/training scales, cards, models of action, guidance, etc.), which is often reflected in the lack of rigorous organization of the teaching practice for students, future teachers;
- the relative lack of connection between theory and pedagogical practice and often stereotypy and uniform manner of the strategies used;
- the cognitive priority of trial and final lessons design, the excessive importance given to the scientific content of the lesson (most times "untreated" pedagogically) in preference to methodological issues;
- the unjustified amount of passive, contemplative and by trial-error learning to conduct effective teaching techniques and working with students;

- the quasi-unstructured observative practice and hastily and superficial trial lessons design often remains the main means of initial pedagogical training.

After all these considerations and investigative-educational approach developed by us, we consider it necessary to propose a **practical approach to the development of methodological skills** during the psycho-pedagogical training in general and in teaching practice activities, in particular, aiming at five components as follows:

- the *epistemological* component, representing the theoretical basis consisting of theories, laws, concepts, pedagogical paradigms on teaching competence;
- the *teleological* component involving the curricular objectives of the methodological skills training, translated in pedagogical terms to the level of the objectives of knowledge/ implementation / integration of specific teaching activities;
- the *content* component, following the structure of the psycho-pedagogical module's curriculum as well as the additional activities and self-training, proposed for the Teaching Practice Discipline;
- the *methodological* component, involves carrying out learning activities during teaching practice and complementary activities using teaching methods such as: role play, autoscopia, simulation, exercise, modeling, etc.;
- the *evaluative* component representing the continuous and permanent feedback, by means of methods and assessment tools as: portfolio, reflection journal, training journal, self-assessment, inter-evaluation.

This possible practical approach for methodological skills training and relations established between the five components are illustrated in Figure 1.

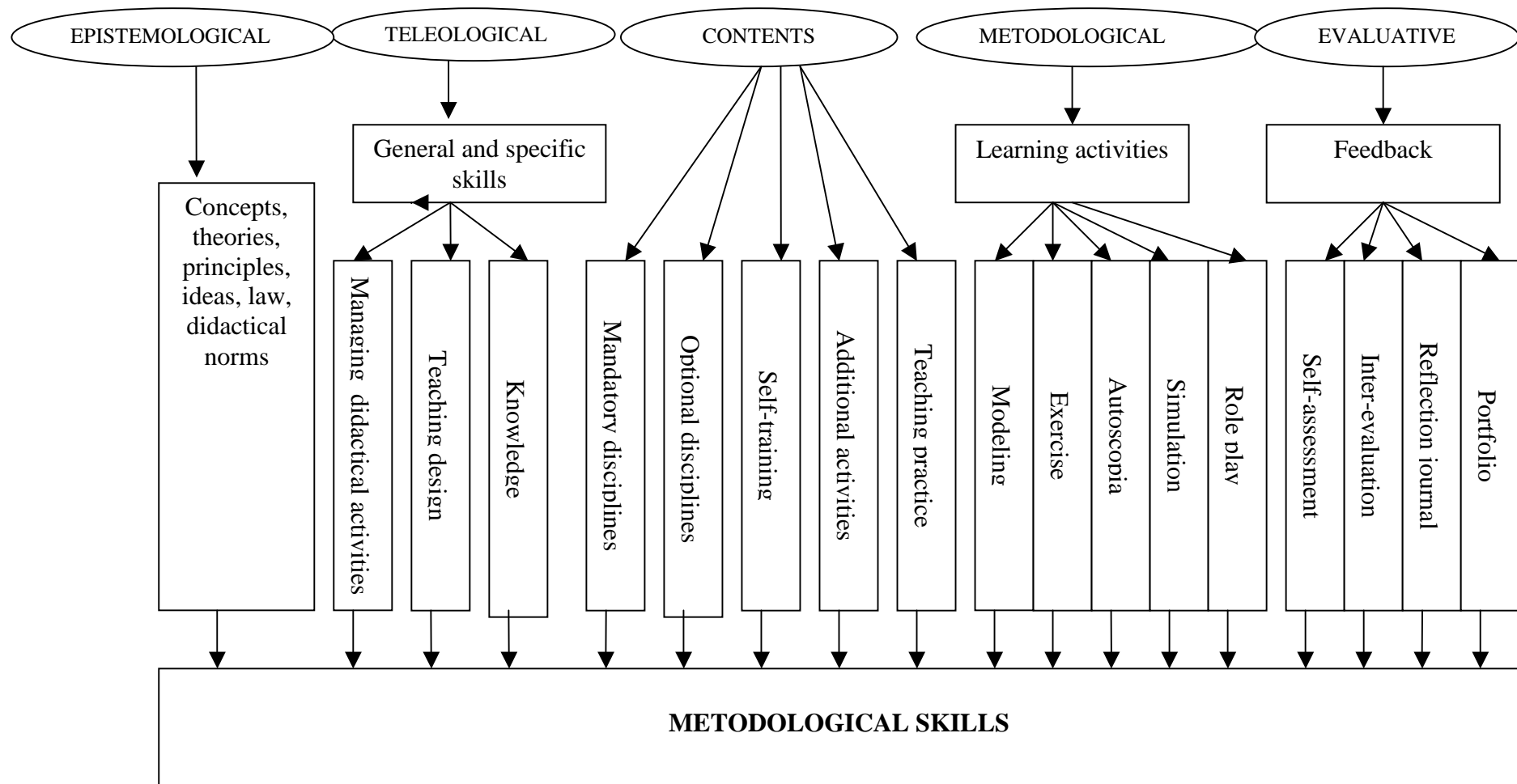


Figure 1. The practical approach for methodological skills training

Another possible solution to remedy the current situation of teaching practice may be the intention of the Ministry of Education, Research and Innovation, which, in the draft for the Education Code has introduced a provision whereby the Bologna graduates of the cycle are required to undertake a year of educational training as substitutes, and where they will each have a mentor, an experienced teacher who will monitor not only their pedagogical and methodical training, but also their teaching vocation. The draft also states that at the end of the training year an exam will be taken which will consist of two stages: in the first stage, **an eliminatory one**, the practical teaching skills and classroom behavior with students are assessed by the mentor, by an assessment and three inspections by the County Inspectorate. If graduating this first evaluation stage, the second stage will follow, the theoretical evaluation of psycho-pedagogical skills, conducted by the university on the basis of a paper-work.

We believe that this additional year of actual work in the school could be a solution for improving the initial training in terms of pedagogical training, the "trainee" student taking daily contact with all that a school activity implies. But the solution depends solely on political will and availability of the political forces to allocate financial and human resources necessary to such an undertaking.

Also, another solution could be proposing by the universities to graduates from Educational specialties or graduates from Training Department for Teachers (on postgraduate level), a **didactical master** that has as main objective the *professionalization of teachers*, on the one part, on the other hand, *a better practical training of graduates*, future teachers.

This practical training bears in mind that the teaching practice will be conducted over a longer period of time and will include graded activities correlated with theoretical training:

- a greater amount of hours in which the assisting mentor attended their classes, followed by their pertinent analysis;
- projects aimed to capitalize on the knowledge of the courses;
- more teaching under the guidance of the mentor and the didactician;
- participation in educational projects, research projects, school-family partnership activities etc.

Of course the organization of such complex activities in a Masters Program is financially demanding and also intensive on the human resources and universities may be reluctant to invest, given the current global economic situation. The problem could be solved by attracting extra-budgetary resources through participation in various projects and programs in partnership with foundations, NGOs, etc.

From the research conducted and based the conclusions drawn, we consider necessary and useful to formulate the following **methodical recommendations**; given the relatively short teaching training period, finding ways to optimize the content of this discipline, so that students become beneficiaries of a top-level training;

- using the practical approach for developing the methodological skills imagined by us in teaching practice activities for all students from the psycho-pedagogical module;
- implementing the teaching practice schedule (discipline sheet) we developed in order to provide a guide both in the initial and ongoing training process of teachers;
- achieving a more effective collaboration between university teachers and teaching practice mentors from the application schools so that preparing students for future teaching activities can be carried out effectively.

Until now, future teachers were subjects of initial theoretical and specialty training as well as psycho-pedagogical training. This training is clearly insufficient when it is not complemented by an appropriate practical training. For this reason it is recognized that initial and continuous training programs for teachers can be judged by two criteria: quality of the theoretical courses and the organization and duration of the teaching practice. Preparation and training of teachers requires transformation of personality and the dynamics of training should be extended from the subject to environment, socio-emotional and motivational dimension of personality needed to be addressed during some special programs, with the purpose of not sending the graduate unprepared in life and subjecting them to tremendous environmental action.

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