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The Analysis of Teachers' Skills and Abilities for the Pre-University System in the Initial and Continuous Training Programs

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Abstract

The present paper intends to identify and analyse the teacher training models that exist in the European educational systems. The two professional training models, the simultaneous and successive ones, are found in most of the European countries. Both initial teacher training modules have advantages as well as disadvantages and exist in the European educational system both individually and at the simultaneously. The procedure we applied in our research is based on the comparative research of the European educational systems (length, structure, competences). We identified the types of teacher training systems and we made a comparative analysis of the most comprehensive educational systems, identifying and describing the teaching skills developed in the training programs.

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1. Introduction

In the context of our research, the initial or primary training of the teachers stands for the situation in which at the at the University level they added the psycho-educational module, available to all students, but also to people who already graduated university but did not attend this module while being students. For these, the subjects in the psycho-educational module can be studied in a postgraduate regime.

With time, two ways of training teachers have developed: the initial training way, which is known as complete and stable, realized to cover a whole professional career and the natural model of the professional training, which is a basic survival toolkit for the first years, and followed, afterwards, by the modules of professional training courses and specialized assistance which are meant to bring the needed corrections.

The teachers' pedagogical training, both theoretical and practical, may take place at the same time with the general training (the simultaneous model) or follow after it (the successive model). These two types of training are to be found all over Europe in different degrees: the simultaneous training is offered to future teachers from the lower secondary education in Belgium, Denmark, Germany, Austria, Portugal, Norway, Sweden, while the

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successive training is organized as part of the initial training of teachers from Greece, Spain, France, Ireland, Italy, Luxemburg and Scotland. In the upper secondary education, the successive training is more common.

In the simultaneous training, specialty (major) topics are studied at the same time with those from the psycho-pedagogical module, so students have the opportunity to start their teaching career immediately after graduation. Another advantage of this training system is the one of systematization and strengthening of both the psycho-educational and didactic knowledge while studying specialized topics, but also the one that links theory to practice, students being able to see immediately how this process of teaching-learning-evaluating knowledge works, skills, what are the attitudes and values that are to be transmitted to the students during the pedagogical practice works. In the successive training, the specialized subjects are studied before anything else including those from the psycho-educational module. This system has the advantage that: the specialization topics can be studied thoroughly and systematically (because they benefit from a longer time to be studied), but the starting point of the teaching career is delayed by the fact that the psycho-pedagogical subjects are studied after graduation.

2. Training systems and skills

2.1. Simultaneous and successive in initial training

This paper aims to identify and analyse patterns of teacher education found in European education systems. The two training systems, the simultaneous and successive ones, are found in most European countries.

Both ways of initial training have both advantages and disadvantages and exist in the European Teaching System, either together or individually. For those who attend specialized courses, all universities in the Romanian Educational System have Teachers' Training Departments that offer psycho-educational topics both in the initial and the successive teaching. The study of the psycho-educational module offers the possibility to develop a teaching career for any field. In Romania, people who want to develop a teaching career may follow either the successive or the simultaneous type of module. The topics of the psycho-educational field given by The Ministry of Education and Research at a national level, in the Romanian educational system are: educational psychology, pedagogy I (introduction in pedagogy, the Theory and the Methodology of the Curriculum), pedagogy II (The Theory and the Mythology of Teaching and the Theory and Methodology of Evaluation), the didactics of teaching the specialization subject, the sociology of education and educational management. There is also the possibility of studding, as an optional course, the Class Management, Computerized Informational Technology etc.

2.2. General skills

The applied procedure is based on the comparative analysis of European educational systems. We considered that we should firstly identify the types of training systems, in time, the competences and make a comparative analysis of several school systems regarding these issues, to identify and describe the teaching skills made available in the teacher training programs.

In all the educational systems, the Teachers' Training (in terms of psycho-educational and didactical-methodological) implies:

- Wide cultural competencies (wide knowledge in literature and arts, science and technology and information on social-political events);
- Specialized knowledge.
- Pedagogical culture (the theory of education and teaching, teaching standards, children's psychology);

The Romanian educational system values most the specialized competencies, the ability of building pedagogical and transversal competencies, it cultivates most the pedagogical abilities and the aptitudes, in proving pedagogical tact and art (the ability to react to different teaching situations in order to obtain the best results in the student education and training).

2.3. The duration of the training period and skill formation in the European education systems

Our research is a theoretical analysis based on educational policy, documents, curriculum analysis and teacher training systems. Comparative analysis of European educational systems and the way the initial and continuous teacher training programs is made about most countries (France, Belgium, Germany, Italy, Luxembourg, Austria, Iceland and Romania).

The length of teachers' training programs as well as their pedagogical ones is found to be different from 3 years (teachers from the lower secondary educational system in Belgium, Austria, and Iceland) to 7 years (the successive type in Luxemburg). In most of the countries, 4-5 years is the average time dedicated to teacher training.

When speaking about the teacher training, we must keep in mind that the triangle of knowledge has become: innovation, education and technology and as a consequence of the teachers becoming professionals it should be followed by the development of creativity and the accentuation of this creativity, the ability to innovate, educate and develop technological abilities, the abilities to accept and promote the novelties.

2.4. The competences of the teachers from the perspective of the studies in the domain

We notice that, as far as the schools and the future education are concerned, about the teachers' competences, through the prospective analysis of education, we can discover the computerized competences that are important in the didactic process: as knowing how to use a computer in order to make it an everyday instrument of choice (G. de Landsheere) and with its help, to maintain a constant dialogue with the students (OECD). The future cultural revolutions will motivate the institutions which offer programs of initial training of teachers to include and to develop the educational values of computerized competences (communication, attraction, development of teamwork skills, the easier task completion, Internet use, etc.).

The educational system must transform itself in order to match the new individual and social needs and to cope with changes and innovations. These economic, social and political changes determine the need to reorganize of the educational system in order to increase its efficiency, to make it more economic and fit for the new economic and social demands. The progress made by the informational and communicational technologies allows us to see some solutions for these problems. The proper use of these technologies will make the educational system more efficient and advanced, if there is the desire to accept and to make some necessary changes, and the first field that should be submitted to the reform is the initial formation of the teachers. Taking into consideration the fact that the technological innovation stimulates the economic changes, and that it also triggers the so necessary social adjustments, it is also the key to the reorganization which the educational system must accept. The frequent use of computer abilities, multimedia, Internet and other thematic innovations in the learning process may be a good start for the reforming the teaching methods and to motivate the participation into the learning process.

The use of new multimedia technologies in the educational process can develop and enrich the teachers' competences and abilities. But in order to exploit to the fullest their teaching potential, the teachers must know them well and use them efficiently. The initial training of the teachers must include multimedia technologies courses, computerized teaching, etc., so that they can improve their knowledge and most of all, to form and develop their computer use abilities. In order to become an efficient teacher in the learning process, the use of the computer implies a specialized training in the subject.

3. Results

3.1. The profile of the educational competences of a manager

The qualifications a manager has in an institution are the most valuable assets of that institution. They differ from a level to another, and according to managerial types. There are some general skills that any manager should have. In the specialized literature, we can find: the conceptual skills, the human skills and the technical skills. We can observe that the ability of using multimedia technologies is through the three most important skills.

Therefore, as technical competences, we can mention: knowing the methods, the techniques, the equipment involved in a financial activity, etc., the necessary abilities to accomplish a specific task (to write and develop

computer programs, to fill in financial documents, the analysis of any kind of statistics, to write official documents, to plan projects, programs, strategies, etc.). They can be exercised either through the initial training programs for the teachers, or through different courses offered by specialized institutions.

All these categories of competences are important for all the managers, but the conceptual ones are more important for the top managers (inspectors, scientists, educational actors directly involved in the development of the educational politics), the technical competences are more important for the lower level managers (the teachers, as classroom managers), and for the medium level managers (school principals/headmasters), both technical and human competences are important.

After an analysis of the programs and the methodologies developed by The National Council for Teacher Training for Pre-university Institutions, we can say that as far as the educational manager's profile is concerned, the computerized competences are explicitly required, because the manager's activity is more complex and visibly more efficient by using the new multimedia technologies. In the educational management, certain functions and abilities which demand for organization, control and a much more complex evaluation, are perceived as much more important than the educational activity itself, the communication or planning functions.

Now, we will introduce the general competences of the leading, counselling and control staff (head masters/principals, deputy head masters/principals, inspectors), as they are discussed in the programs of continuous teacher training programs, highlighting what could improve the educational management by applying some Internet using abilities:

Communicational and relational competences (specific skills- the selection of the adequate means of communication for improving the managerial activity of the head of the educational institution; the adaptation to various/unexpected situations, in order to effectively solve educational problems; the resolving of the conflict situations by investigation, mediation and negotiation, creating a climate of trust and responsibility; the adequate use of concepts- communication, educational communication, communicational blockages, sender, receiver, conflict, negotiation, priorities, innovation, educational marketing, educational needs, analysis of those needs, market, clients, offers, services, educational demands, the application of concepts in planning and developing the educational management activity, the adequate organization of the managerial activities according to the principles of the management of priorities, the management of the conflict states and change stress; the adequate use of the time-space factors in order to optimize the educational management, taking into consideration the principles of the priority management and also of the management of the conflict states or the change stress; the display of an innovating professional behaviour, the valuing of the personal qualities and assuming the professional deontological principles, the access of a variety of resources for documentation purposes, the display of an empathic behaviour in the relation with the students, the parents and the other teachers or other educational partners; the planning and developing of the management of the educational institution as an act of communication; the development of some common school-family-community projects on educational matters), etc.

- Psycho-social competences (specific competences – the valuation of the individual and group particularities of the interlocutors, with the purpose of realizing an efficient communication; the adoption of an adequate behaviour in the relationship with the interlocutors, to create a climate of collaboration; the acquisition of abilities of rapid adaptation to social changes, the development of efficient partnership strategies: principal-teachers, principal-students, principal-parents, inspectors-principals, teachers, parents; the collaboration with the parents/the community in order to realize an authentic partnership in education; identifying the dynamics and the trends on the labour market and relating them to the educational process; the solving of the conflict situations in order to ensure a trustful and responsible climate in the institution of education; the use of psycho-behavioural self-control techniques and methods; adopting efficient behaviours for over passing crisis situations), etc.
- Competences regarding the use of multimedia technologies (specific skills- the synthesis of data in order to create a data base that would be useful in the managerial action; the valuing of the information from the data base in order to make decisions according to the specific realities of the educational environment; the use of multimedia and computerized technologies in order to optimize the activity and to ensure its quality), etc.

- Leadership and coordination competences (specific competencies – the planning of the activity in order to develop a high-quality educational process; the organization of the activities in order to meet the objectives in the management plan; the coordination of the teaching-learning process in order to obtain the educational progress), etc.
- Evaluative competences (specific competences: the establishment of the evaluation criteria and objectives by respecting the principles of the total quality management; the use of the specific evaluation techniques and instruments in the educational process; the evaluation of the educational process, with the purpose of identifying the needed skills in forming the teachers), etc.
- Resource management and administration competences (specific skills- the management of the material and financial resources according to the priorities of the management plan and complying to the general and specific legislation; the management of the decisional process, by assuming responsibility or by delegating responsibility for work-groups in the educational institution; the use of the information from legal documentation, the curriculum and the evaluation documents, from the educational reality of the lead institution, in order to make appropriate decisions ; the efficient use of the existent human resources and the selection of the suitable staff for the institution and its' development strategy for the next years; the efficient use of time resources and setting priorities), etc.
- Competences regarding the institutional development (specific competences – the analysis of the educational context in which the institution functions, in order to plan an adequate strategy for the institutional development; the planning of the strategy for the institutional development; the promotion of the national and European educational values through programs and partnerships), etc.
- Self-management competences (specific competences - the evaluation of one's own activity in order to increase the quality of the management process; selecting the personal training path for career development, according to personal goals and with the specific of the institution; displaying an open-minded attitude towards the innovating trends necessary for the professional development), etc.

3.2. General and specific competences of the teachers

By analysing the CNFP documents, we can draw the conclusion that all the continuous training programs for teachers in the Romanian pre-university educational institutions mean to train, apply and develop the following general competences, together with their specific subordinate ones.

We will now underline those that can improve the educational process thanks to the knowledge and abilities to use the Internet:

- Methodological competences (specific competences – the adequate use of the educational concepts and theories: interdisciplinary approaches, The Theory and the Methodology of the Curriculum- TMC, General Didactics or The Theory and the Methodology of Teaching- TMT, The theory and the Methodology of Evaluation (TME); the application of the modern concepts and theories regarding the formation/the development of knowledge capacities; the application of the methodical and psycho-pedagogical and methodological theories to the specific educational situations; the use of the knowledge in the teaching of the subject methodology in planning the curriculum and the learning units left at the choice of the educational institution; the development of the abilities, skills and talents; the selection and the processing of subject contents in order to obtain the accessibility of information; the organization of the contents in order to be learned by all the students; the planning of the instructive-educational contents every term and annually; the adequate organization of the teaching activities according to their dominant lesson type; the use of teaching strategies and methods that are adequate for the individual/ group particularities, to the purpose and the type of the lesson; the selection of the best methods in forming the critical thinking; the adoption of the educational strategies that allow the efficient use of auxiliaries and educational means in the learning activities; the adequate use of space-time factors in order to optimize the instructive-educational process; the application of the modern concepts and strategies regarding the formation of the action schemes; the display of an innovative logical-methodological behaviour professionally speaking; the analysis and the diagnosis of the educational state of the group of students; the realization of the instructive-educational activities; the formation of the thinking way which is specific for that discipline, as well of the systematic way of thinking; the value given to the content of the

educational discipline, by structuring behaviour according to values; the stimulation of the maximum development of each student's potential by content assimilation), etc.

- Communicational and relating competences (specific competences - accessing different sources of information with the documentation purpose; mastering modern theories and concepts on communication (horizontal/vertical, total complex, multiple, diversified and specific); the use of meta-communication in optimizing the relationship between the teachers; displaying an empathic behaviour and helping orientation; planning, leading and conducting the instructive-educational process as an act of communication; the realization of some common projects: school-family-community, based on educational matters).
- Student evaluation competences (specific competences- the evaluation process planning: phases, forms, types; mastering modern theories, concepts and practices of creative learning; use of adequate group/individual evaluation strategies; elaborating the evaluation instruments according to the purpose and the particularities of the individuals/the group; displaying a stimulating psycho-pedagogical behaviour, that would be motivating and open-minded towards the students, the parents, the teachers; the use of the specific methods of critical thinking).
- Psycho-social competences (specific competences – the mastering of the modern theories and concepts regarding the development of knowledge abilities; the formation of the abilities for rapid adjustment to social changes; the use of the methods and techniques of knowing and activating the students; the selection of the optimum methods in order to develop their artistic /aesthetic sense; the undertaking of the social role of the teacher; the identification of the dynamics and trends of the labour-market and their association with the instructive-educational process; the development of effective strategies in the school-family partnership; the organization and management of the learning environment in collaboration with the Parents' Committee of each class; the collaboration with the parents/ the community, in order to realize an authentic educational partnership; getting involved into the development and making of international cooperation in school projects).
- Technical and technological competences (possible specific competences- the design and use of the learning means; the practice of action schemes in order to obtain the achievement/the mastering of practical abilities; the use of the computer in the instructive-educational process; applying the educational strategies for an efficient use of educational auxiliaries/means in the teaching process), etc.
- Career management competences (specific competences- the use of behavioural self-control techniques and methods; displaying efficient behaviours for surpassing crisis situations; displaying open-mindedness towards the changes that occur in competition, exam, contest situations; the taking full responsibility of the different roles coming with the theoretical evaluating implications of being an examiner/student/contestant/exam supervisor, etc.; the display of a reflexive behaviour towards one's own educational processes; the display of open-mindedness towards the innovating trends necessary for the professional development; the assimilation of the organizational knowledge), etc.

1. Discussions

Instead of exclusively teaching the information in a structured way, teachers must prove a deep and vast understanding of the subject, to use a great variety of teaching methods, to ensure support for students by creating projects that can prompt learning, to offer support and timely answers for groups and individuals, to guide students towards key concepts and problems raised by the gathering of information, processing and using them and to adapt flexible forms of formative and summative evaluation.

Thus, as an instructor (tutor), there are three roles one must fulfil:

- Instructor as shaper which involves a person that stimulates the students to create materials and active learning situations;
- Instructor as coach, consultant, referent, evaluator;
- Instructor as support which represents more than a guide or a mentor, bringing together the abilities and skills of a manager, supplier or broker.

But he can also be:

- Collaborator: many of the activities based on information technology and communication reside on a project-oriented didactic strategy. In this type of activities, the teacher participates alongside the students, as team member, at the solving of the tasks proposed and agreed by the group.
- Developer: In order to teach, the teacher develops teaching materials that can be under the form of printed or digital materials.
- Researcher: it is the natural tendency of every teacher if we consider his or her innovations in the field of didactics. Using new IT&C as innovation in the teaching process offers to the parties involved the possibility to obtain results and reach conclusions that can be valued by their colleagues in curricular planning.
- Self-educated in IT&C: Basic notions in IT&C use represent the first step in teacher training. Teachers involved in introducing innovations benefit from self-instruction in IT&C methodology for educational use, both pedagogically and technically.
- Member of the teacher team: Activities that use new technologies often require team activities because abilities, skills and knowledge of each one can contribute to accomplishing the work task (ex. Collaborative projects, website-building projects, etc.).

Teacher and student's roles are independent from one another. Whilst the teacher is a moderator, a tutor, the student becomes self-confident, active researchers to obtain information. As a consequence, the responsibility of the students regarding learning increases.

We believe that in both initial and continuing trainings it is very important that teacher does education through the skills he formed, developed and practiced. These skills provide the possibility of pursuing so many roles and responsibilities. Analysis and future research may aim to identify all these tasks from several perspectives - pedagogical, sociological, psychological, political, etc. So far, little research was conducted in the field, and training programs are specifically aimed at practicing specific skills for teachers.

Our contribution to this paper is to identify the types of training systems, their characteristics (duration, consisting skills, roles, responsibilities, etc.), the implementation modalities, and further research may confirm that their educational practice, in the extent they are determined, will easily achieve the aims of education, and change the way how teachers are expanding their roles or transform themselves according to the needs of all the actors directly involved in the educational process, or influence the educational policies.

5. Conclusions

A new paradigm replaces training with the permanent professional education of teachers. This approach includes at least three dimensions:

- The initial training offers teachers a solid knowledge base; competences in teaching, classroom management and skill selection; mastering the subject they teach and knowledge with the use of various educational resources, including technology.
- Working sessions, seminars and short courses that offer structured opportunities made for the teachers to gain new teaching skills as well as the development of the IT use in classroom and career development skills.
- Unceasing support, both pedagogically and technically for teachers is given to them while they face daily challenges and responsibilities of this new instruction method.

Teachers' professional development is essential in order to efficiently use technology in school. Thus, spending resources on hardware and software without financing the proper professional development is a great loss. Introducing new technologies in education will reduce the time consumption and repeatability of tasks offering teachers the possibility to spend more time on evaluation, individual training, and designing lessons in a new and competitive form. We believe that this profession will become more interesting but also more exigent. Focusing attention on developing skills involves the existence of special abilities or competences among teachers.

To rapidly adapt to these changes, the teacher must be prepared to acquire competences to efficiently use the Internet in the didactic process.

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