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**THE STUDY OF DEVELOPMENT OF TEACHER COMPETENCIES
AND PROFESSIONAL EFFICIENCY**

SUMMARY

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Introduction

Opinion formation, the expression of attitudes not only influences the formation of social relations, but also sums up our value judgments related to an object, person or event and helps us in the better understanding and development of the surrounding social media. Exploring the opinion of the society of teachers on the regulations on their profession is an important step in the education policy. It allows the assessment of the success of reforms and the rectification of potential problems.

The originality of this thesis consists in the fact that it examines the effectiveness of the educational reforms through the opinion formation of the society of teachers and not through the meeting of standardized requirements.

The development of the knowledge-based society requires a paradigm shift, the overwriting and updating of the traditional pedagogical culture in the education system as well. Thus the main goal in education policy is to improve the quality of teacher education and to support the professional development of teachers.

In this thesis, we aimed to outline the necessity and difficulties of the changes in the education system – the transition to competency-based teaching; to assess by what steps the policy, planning and organization of education intends to promote this process; and to examine the opinion of teachers about the new regulations and possibilities and about their own professional development.

The possibility of studying the above is given by the sociology of teaching and the sociology of education. As disciplines between sociology and educational sciences, they study the sociological factors that are influenced by teaching and education structures and processes.

The literature review outlined the relating theory background, from the changes of the pedagogical culture (the transition to competency-based teaching) to the teacher competencies and the possibilities of their development, and to the possible fulfillment of teachers' professional development. We showed the models of teachers' continuing education and systematized the empirical research on the topic.

In the second part of the thesis we presented the regulation on continuing education in Romania, the development possibilities of teacher competencies, the frequency, motivating and inhibiting factors of participation in trainings, and the opinion formation of teachers about the requirements of the Romanian legislation that regulate their professional development.

At the end of the thesis, using a complex model of the continuing education of teachers, we formulated a comprehensive proposal for professional development, the successful realization of the paradigm shift.

Chapter I.

In the first chapter we presented the role of sociology as serving the planning and organization of teaching. We briefly described the creation of sociology of teaching and of education, their becoming independent, their definition and social role.

We formulated that the sociology of teaching and of education represented an important research area of sociology, but became separate sciences only through the specialization of sociological researches. Today the sociology of teaching and of education are considered independent, interdisciplinary sciences that are fed by dual roots: by pedagogy and sociology.

In our study we described the definitions and social role of the sociology of education, and highlighted the sociology of education character of our research (the study of attitudes, and the reflection on the necessity and difficulties of the changes in approach that developed due to the shift in pedagogical paradigms).

Similarly, we briefly reviewed the definition and research areas of the sociology of teaching, and formulated that the analysis of the system of trainings, and of the related education policy decisions, legislation is closely related to the assessment of the sociology of teaching issues. This confirmed the sociology of teaching aspect of our research.

Chapter II.

In this part we described the paradigm shifts of the pedagogical culture and the formation and role of the competency-based teaching.

In the introductory part of the chapter we came round the necessity of change from sociological, education policy and pedagogical points of view. We showed that, due to economic and social changes and to the new discoveries and research results of the sociology of teaching and of education, of psychology and of education science the former – traditional information-based – teaching model is no longer able to fully meet the expectations, which made it necessary to overwrite, improve the teaching-educating system, approach.

We briefly discussed the necessity of life-long learning made indispensable by the formation of the knowledge-based society (Vopaleczky, 2005), the development and completion of the compulsory public education (the widespread of the general secondary

education, followed by the spread of higher education), the change of degree values, the development of science and technology, the economical interests etc.

We talked about the changed role of school, that on the one hand undertakes the foundation of competencies – and thus the foundation of permanent learning – by cultivating the basic skills; on the other hand focuses on developing skills that are necessary for open knowledge (of thinking, learning, situation recognizing etc.), and by that the students learn to adapt quickly and successfully to the ongoing renewal of the expectations.

In the section entitled *The development of pedagogical culture* we described the constant renewal of teaching-educating systems from the initial imitative and spontaneous learning up to the currently known teaching-learning process (Nagy, 2010):

- the first paradigm shift implied the transition from the *school of life* (spontaneous learning, spontaneous socialization) to the *information-based pedagogy* ;
- the information-based school was reorganized with the appearance of mass education (compulsory education), this is when *the school of action* was established (especially between alternative schools, pedagogies);
- the third paradigm shift is currently taking place and it implies the *competency-based*, criteria-orientated helping pedagogical culture.

We showed that the promotion of the competency-based teaching and the development of competencies is an extreme challenge for education policy and education development. It requires a paradigm shift that, as Gábor Halász (2009) states, „requires the rethinking of the traditional educational logic as a whole, and that, for the time being, probably raises more unanswered questions than the number of answers it offers”.

In the second section we introduced the concept and definitions of competency as well as its basic forms and role. We formulated that competencies are part of the personality that enable the person to successfully solve the problem situations they face (decision-making and execution). It enables the person to form an opinion, find solutions, to effectively apply knowledge contents, explore connections, renew, adapt. We showed that the development of competencies includes the development of skills, but beyond that it includes the responsibility for one's activities, commitment and autonomy.

In Chapter III.

we presented the competencies required by the competency-based teaching and their development possibilities. In addition, we examined the literature and research related to the activities that aim at professional development. We gathered the new requirements for teachers and the dimensions of professional development that can be derived from the models of continuing education (introduced in the next chapter).

We showed that parallel to the paradigm shift in pedagogy the requirements for teachers became increasingly complex. We described the objectives of professional continuing education, emphasizing that the development of teacher competencies is difficult also because the trainings can serve multiple purposes that is difficult to integrate and define as general development requirements.

As regards the possible development areas of teacher competencies, in our study we used the model integrated in three dimensions by Noémi Birta-Székely (2010) (basic character traits; pedagogical skills and abilities; pedagogical knowledge). The study of literature has confirmed the classification credibility (Szabó, 2013; Kollár, 2008; Bagdy, 1997; Falus and Kotschy, 2006; Smirthrim et al., 2008), therefore we also used it in the creation of a complex model for the assistance of teachers to catch up with the new ideas.

The efficiency of the activities that aim at the development of professional competencies was demonstrated primarily by the presentation of related researches (Opfer and Pedder, 2011; Garet et al., 2001; Osborn, 2006).

Following Setényi (2009) we highlighted the fact that often the activities that aim at the development of professional competencies do not achieve the desired effect since the organizers do not take into account that the devices, techniques used in basic trainings are no longer efficient in the training of practicing teachers. The latter need trainings that are characteristic to the teaching of adults. Related to this, we presented the four pillars of adult education (the combination of individual experiences with the curriculum; the offering of meaningful, usable curriculum; efficient learning organization; continuous personal assessment).

At the end of the chapter we briefly presented the attempts to measure teacher effectiveness (quality control, portfolios).

Chapter IV.

In this part of the thesis we introduced the models of continuing education of teachers and the dimensions of competency development.

The first introduced model was the integration of nine models by Aileen Kennedy (2005) that was organized depending on the extent to which they are able to change the professional practice and approach of teachers, and to which they support teachers' autonomy. They are as follows: the training model; the rewarding, recognition providing model; the deficit-model; the waterfall model; the standards-based model, the coach/mentor model; the functional community model; the action research model; the transformer model. In Romania the first five models can be found, although by the introduction of the mentor program it seems that the coach/mentor model will also root in. These models slightly promote the teachers' autonomy and the individual planning of professional development, therefore we think that it is between the further tasks of education development to support the critical-analyzing, research activities of teachers.

Along the Guskey-models (2002) we presented the possible forms of conception shift. According to the first model, the developing programs target at the changes of teacher approach and attitudes, which in turn will affect the change of teaching-educational styles and methods, which will lead to more efficient learning-teaching results. According to the second model, the conception shift may happen vice versa. The changes begin at the level of teacher skills and abilities, which will affect the students' learning results, which in turn will change the teacher approach and attitudes in connection to the new pedagogical approach.

According to Kolb's learning model (Lukács, 2006), the development of teachers takes place through the following phases: experience acquisition phase (trainings, readings, lecture attending, peer discussions etc.); experience analysis phase (the understanding of what they learned); the phase of comparing thinking and experience with their existing knowledge; and, as a fourth phase, the application of the above (classroom testing). The process does not end here, but go on at a higher level through the same phases: classroom experience acquisition, analysis (what was useful and what needs reconsideration), thinking (about efficiency), application (testing), and so on, in the form of an ascending spiral.

According to the model of Clarke and Hollingsworth (2002) change happens along influence and reflection, on four different areas: in the personal domain (teacher knowledge, principles and attitudes); in the experimental domain (professional experience, experimentation); in the consequences domain (outstanding results); and the outer domain (information sources, motivating and supporting events). The model recognizes the complex nature of professional development, the interdependence between the domains, and highlights the fact that by the influence and reflection processes change in one domain will affect the others as well.

Next, we created a complex model for the assistance of teachers to catch up with competency-based teaching. It requires approach shift at four levels: the filtering of teachers-to-be; the improvement of training quality; the life-long training of practicing teachers; follow-up.

This enables the parallel development of beginning and practicing teachers, their assistance to catch up with the competency-based educational principles. The steps of the model enables the teacher society to efficiently catch up, but in order that the change is society-wide (that is, the new generation follows the principles of competency-based knowledge), it is required that parents, employers and sustaining institutions are also implied in this process.

Chapter V.

studied the possibilities for teachers' professional development.

The literature discusses several approaches to teachers' professional development. It is seen as an individual or group development, an externally-internally motivated activity; and as an emotional and cognitive process.

Our thesis based on the categories of Beatrice Avalos (2011) who describes eight areas as possible accomplishment of professional development:

- the professional development of new teachers;
- self-reflection as a key component of change;
- professional development promoted by technical equipments;
- learning by non-formal trainings; the impact of professional partnerships on teacher professional development;
- workplace learning; peer facilitation;
- the role of school culture in development;
- changes in teachers' knowledge contents, beliefs, teaching practice;
- changes in students' learning.

1. The professional development of new teachers

In some countries, new teachers are seen as equivalent to teachers with several years of experience (in Romania this is undergoing a transition). However, the anticipated trust overloads new teachers. They have to undertake the same amount of classes and duties as their more experienced colleagues, irrespectively to their need of extra time to prepare for

their classes (due to their lack of experience, routines, teacher devices) (Falus, 2006). Many of them get frustrated in a short time. They see their lack of experience as a failure, and leave their profession if there is no effective support to help them become successful educators. In literature, the phenomenon is referred to as *reality-shock* (Szivák, 2004) or *praxis-shock* (Nádasi, 2010).

We emphasized that most countries tried to facilitate the efficient start of new teachers' career by the introduction of the mentor system. We highlighted some of the positive aspects of mentor programs (the acquirement of teacher identity; the support of new teachers, the reduction of teachers' career-leaving), and some of the negative ones (focus is placed on mentors and not on the helping process; the prescriptive nature of the programs leads to the suppression of cultural diversity, teacher identities and educational practices).

2 Self-reflection as a key component of change

Changes in pedagogical beliefs and teaching practice occur when teachers, beside acquiring new information, learn to examine their own attitude and analyze their efficiency (Borko and Putnam, 1996). They learn to discover their strengths and weaknesses, the areas where changes need to be made (Reis-Jorge, 2007).

Several studies have confirmed the importance of self-reflection in the development of teacher competencies. In this subsection we presented the self-reflective activities confirmed by researches that are proven to contribute to professional development.

Runhaar et al. (2010), involving 456 teachers, demonstrated that the self-reflection of teachers and their request for feedback about their work is strongly related to the development of professional efficiency (the ability to develop), to the setting of new learning goals (motivation), and to the exploitation of possibilities (support given by hierarchical superiors and mentors).

Joint researches with other teachers and/or universities (Reis-Jorge, 2007; Ross and Bruce, 2007, Burbank and Kauchak, 2003) demonstrated that joint research work develops teachers not only at academic and professional level, but at personal level as well: at the level of self-knowledge and the knowledge of others.

Breault (2010) in his study approaches from mythology, folklore, psychology and literature to demonstrate that effective storytelling assists in coping with problems, and in personal and professional development.

At the end of this subsection, we presented the portfolio as a device to promote the development of self-reflection. The portfolio can be a proposed solution for looking back to

the work done, summing up and analyzing the activities and results, and making it possible to build future plans based on past experiences.

3. Professional development promoted by technical equipments

Teachers' lifelong learning is facilitated by technical equipments primarily by reflection on the educational activity of their own and others, by the public discussion of the teaching practice, and as a means of effective planning, organization and implementation. The most researched device usage in terms of teacher professional development refers to the use of video-discussions and online forums (Avalos, 2011).

Modern technical equipments usage most often refers to the use of the computer, TV, video (DVD recorder), but trainings that taught teachers only the usage and usability of the devices did not change the teachers' attitude to teaching, neither the assessment of their own professional efficiency (Lankshear and Bigum, 1998; quoted by Prestridge, 2010).

Video-discussions cover video-club meetings (watching movies, then discussing them), as well as the subsequent viewing and analysis of own classroom practice. The latter method is deemed by some authors (Borko et al., 2008) one of the most efficient methods to promote development. Its popularity may be due to the fact that it records every classroom movement, even the ones that the teacher does not notice during teaching (quick situation responses, body language, the social network of the class etc.).

Professional development on online platforms includes the necessity of both peer and critical discussion, which provides opportunity for self-reflection and thus for the change of pedagogical beliefs and practices. Research has shown that active forum participation (commenting, suggesting, sharing own experiences, raising new questions and problems, sharing academic information materials etc.) makes changes in teaching beliefs and practices faster and more efficient (Prestridge, 2010).

Based on the study of Marx et al. (1998) we revealed that technical equipments usage requires the following conditions in order to promote the fulfillment of professional development: adequate investment in infrastructure and constant maintenance, development and operation of software programs that specifically assist teachers in their work and are always available to them This requires financial, time and human resources input, which cannot be afforded by many schools.

4. Learning by non-formal trainings. The impact of professional partnerships on teacher professional development

This subsection presents one of the most effective methods for competence development. The research part of the thesis also reveals that learning from each other has been rated number one on the list of professionally developing activities by the teachers who took part in our survey.

The subsection also presents the researches that describe the advantages and pitfalls of the exchange-programs.

Butler et al. (2004) developed and tested an efficient complex model to realize professional development. The active part of the project included workshops, classroom visits, work on joint projects and exchange of experiences between and within schools. Besides, they paid attention to balance the influence of the external mentor (university researcher) and the teacher intervention.

We highlighted that professional partnerships, non-formal trainings and encounters offer learning opportunities to participants that cover not only shared practical knowledge and the know-how of teaching but the discovery of cultural similarities and differences (Law et al., 2011, Holt, 2001; Sahin, 2008).

As regards pitfalls, several studies (Buczynski and Hansen, 2010; Goldschmidt and Phelps, 2010; Gravani, 2008) show that the information acquired through non-formal trainings has been forgotten, or not put to use for a variety of reasons (limited time and resources, the restraining effect of the prescriptive curriculum, organizational problems, the gap between theory and practice).

5. Workplace learning, peer facilitation

Cooperation between teachers, organized either in pairs or groups, can significantly contribute to the development of teacher competencies. This subsection presents the forming power of group norms (the desire to measure up, the involuntary adaptation to others), which can both help and destroy individual development.

According to Goddard et al. (2000), when teachers reinforce each other in their principles and experiences, their confidence in their own skills multiplies. If they recognize and appreciate the work of their own and of others, the positive effects can be measured on the students' results. High collective teacher efficacy generates the students' good academic results, and vice versa, the lack of good peer cooperation disadvantages the students' academic results regardless of their social and economic status (Ross and Bruce, 2007).

We found it important to emphasize that these supportive relationships (in pairs or groups) would only work properly if there is not a hierarchical, but an equal relationship between members (Lee, 2008).

In our study we presented the advantages of teacher cooperation on the community and the learning possibilities it offers. We highlighted that workplace facilitation and the formation of a supportive community creates a secure medium for professional development, significantly contributing to the setting of new pedagogical ideas.

6. The role of school culture in development

This subsection presented the possible models of school organization culture (based on Golnhofer, 2006). There were briefly introduced the club culture type spider web; the role culture that is characterized by assigned roles, positions and occupations; the task culture that is less hierarchical and it builds on cooperation; and the personality culture that builds on individual skills.

We found that schools in Romania are characterized by club culture. School principals have almost all the control, and although the school board consists of teachers and parents, it is rare for them to interfere with the leadership. The most common organizational culture of schools using alternative teaching methods is the task culture. These communities are characterized by cooperation and the sharing of tasks.

In terms of school culture orientation we presented the following four types based on Serfőző (2005): the *person-oriented* school culture (colleagues support each other in development, a sense of togetherness permeates the institution); the *innovative* organizational type (supports individual development. It particularly expects flexibility and willingness to act from teachers); the *goal-* and the *rule-oriented* organizational cultures (seek primarily to achieve organizational goals. Individual development is subordinated to this).

The type of school culture has therefore a key impact on teachers' professional development. Beliefs, habits, organizational forms affect the competence of teachers. According to teachers, development requires cooperation and dialogue with peers and other professionals which lead to the formation of a well-functioning supportive learning community (Snow-Gerono, 2005).

7. Changes in teachers' knowledge contents, beliefs, teaching practice. Changes in students' learning

Permanent teacher learning that is driven by internal motivations affects students' performance, their behavior at school, the development of their skills and abilities and the formation of their self-confidence. The teachers' confidence in their own and their students' abilities is key to a successful educational process.

To illustrate the relationship between teachers' attitudes and students' academic results, we introduced the *teaching recipe* by Paul Ginnis (2007) that ensures efficient, exciting and enjoyable learning. According to the recipe, apart from the appropriate learning environment, it is basic requirement to increase students' self-esteem, to convey optimism and high expectations, and to let activities be characterized by emotional intelligence, interdependence and accuracy. All this requires a high-level of self-knowledge and self-confidence from the teachers.

We agreed with Roland Barth (1990), who claims that the greatest impact on students' learning and behavior is the personal and professional development of teachers that provides a model of life-long learning.

Based on literature we highlighted that if a teacher is able to change their classroom practices (at the level of attitudes or skills), that will generate changes measurable at students' performance level (Fishman et al., 2003; Lovett et al., 2008; Vogt and Rogalla, 2009; Guskey, 2002), which in turn strengthens the teacher in their own abilities.

Chapter VI. The presentation of the research

The main objective of the research was to assess the possibilities that promote the development of teachers' professional competences, and to highlight the motivating and inhibiting factors that facilitate or impede this process. Our further aim was to examine the continuing education system of Romanian teachers and to evaluate how they relate to the legislation that prescribes and regularizes their professional development.

Following literary sources (Opfer and Pedder, 2011; Korthagen, 2004; Balarin et al., 2011; Avalos, 2011; Nagy, 2010) and the main researches about teachers' development (Reis-Jorge, 2007; Birzea et al., 2006; Kwakman, 2003), we planned our research along the following objectives:

1. To explore the continuing education system of Romanian teachers and the relating legal regularizations.
2. To examine the development possibilities, frequency, motivating and inhibiting factors of the three areas of teacher effectiveness (character traits, self-knowledge; teacher skills and abilities; pedagogical knowledge).

3. To examine the attitude of teachers towards their own professional development (what they do in order to promote it; what they think about the different trainings, about credit points as quality assurance indicators). Examining what teachers think about the fulfillment of the various aspects of professional development as discussed in literature (the professional development of new teachers; self-reflection; technical equipments; learning by non-formal trainings; peer facilitation; institutional culture; changes in teachers' knowledge contents, beliefs; changes in students' learning).
4. To evaluate how the teachers relate to the legislation that prescribes and regularizes their professional development, and explore their attitudes towards the hindering or supporting measures of the system.
5. Based on research results, to formulate a comprehensive proposal for promoting teachers' professional development.

The steps of the research were as follows:

1. The research began with document analysis by studying the Romanian legislation on regulations of teachers' continuing education (2011 Education Law and the supplementary orders and decrees) and the related literature.
2. The second step was the gathering of information, a case study. As a preliminary research, in 2011 we assessed the main issues of professional development by using focus groups. Since the transition to competency-based teaching had been introduced to the university system, we were eager to hear the persons' opinion whose learning was already following this view. Therefore two focus groups consisted of students, and two others of already practicing teachers. The preliminary research was of a great help in compiling the questionnaire.
3. The third step of the research was the collecting of data. Between 2011-2012, we examined the data of 408 questionnaires completed by teachers.
4. The fourth step was the creation of in-depth interviews (in 2013), because the results of the questionnaires did not provide sufficient information about the attitudes of teachers towards professional development and the requirements set by law. We also contacted the training providers who were mentioned in the 35 interviews as good or bad examples and created a short interview to each of them along the same issues.

In Chapter VII.

we presented the research.

Section 1.

The research began with document analysis (2011 education law and supplementary regulations, decrees), and the review of literature that studies and presents the system of continuing professional development of teachers in Romania.

We presented the development strategy for 2001-2004 elaborated by the department responsible for teacher training and trainings, subordinated to the ministry of national education (DGECPPIP¹), the implementation of which is currently ongoing. We also presented the restructuring process that started in 2005 (the introduction of the Bologna system, the beginning of the elaboration of key competencies, teacher competencies), which led to many changes during the period to the new 2011 education law in the area of teacher training and trainings.

We highlighted these changes following the study of Iucu Romiță (2004)² and recognized them as denoting a positive direction.

We presented the legislation that relates to professional development and continuing education, and the paths of professional development of teachers (compulsory trainings, optional career steps).

Greater emphasis was placed on the presentation of the credits system serving the continuing professional development, describing the regulations on service providers, and the research results that showed the opinion of teachers about continuing education.

2. Preliminary research.

The focus group interviews were made with exploratory intent. The goal was to reveal the (sub)areas of study that are worth dealing with in the coming parts of the research. Thus there were no presuppositions, we summarized and examined the answers to the questions. There were 63 persons taking part in the four focus groups: 41 students (with main subject of pedagogy of pre-school and elementary education), and 22 practicing teachers.

The summarized answers reflected the image of a still ongoing approach shift as described in literature and foreign research (Reis-Jorge, 2007; Brumfitt, 2008; Clausen, Aquino and Wideman, 2009), moves the professional development of teacher society in a positive direction.

¹ DGECPPIP – Directia Generală pentru Educația Continuă Formare and Perfecționare a Personalului din Învățământul Preuniversitar

² translated and quoted by Szabó-Thalmeiner, 2009, 166-167.

Comparing the teacher groups with the student groups, we found relevant differences in approach, mainly what concerns the importance of the teacher's personality:

- as a filter in the enrolment to the university the practicing teachers thought that a traditional (aptitude) test was appropriate. The pedagogy students came up with suggestions that reflected the new approach (discussion; motivation, creativity; the assessment of mental aptness etc.).
- most of the interviewees shared the opinion that filtering is very important, as favors the application of persons who are devoted to this profession (inner motivation);
- most of the students considered self-development as most important during a basic training (followed by the development of abilities and skills, and then by theory), while the practicing teachers considered the acquisition of theoretical and practical knowledge as most important;
- the requirement of the ongoing and actively pursued professional practice (organized by a mentor, a methodology specialist or a pedagogy teacher) was emphasized in both groups.

The employment of teachers (should it be organized centrally by the school inspectorate or locally by schools), as well as the introduction of the mentor training divided the respondents. Many of them saw the intensification of corruption and formalities – paper work – in the new regulation. Theoretically they agreed with the employment by schools (it promotes the formation of workplace culture) and with the efficiency of the mentor program (new teachers require help), but as regards the practical implementation, they would not trust school principals (corruption), and the efficiency of the mentor program (restrictions, formalities, paper work).

Both the student groups and the teacher groups considered the methodological trainings for skills and ability development the most important area of teacher professional development, but the student groups considered the personality development and self-knowledge trainings almost the same important.

The introduction of measurement and assessment of professional development by credit points was disapproved especially by the teachers with experience, who thought it is more „formality, the thickening of the portfolio, and point-hunting” than a real reflection of teacher competencies. Several of the pedagogy students found the regulation coming from outside useful, but many of them considered the success of outside control „gambling”.

Besides the difference of opinions the same dissatisfaction, uncertainty was observed in both types of groups. The dissatisfaction was due to mistrust of the training system, not so much of the principles and expectations, but of the theory being put into practice.

The difference was that while the students projected their fears, the practicing teachers shared them based on their experiences. In the teacher groups the bitterness over corruption and not appropriate trainings was higher. They repeatedly pointed out that it makes no sense to force trainings this way.

It is encouraging that in both types of groups there appeared the need of inner-motivation-based professional development, which we consider the cornerstone of professional development.

It is positive that both the students and the practicing teachers were optimistic about their own professional personality, they felt self-confident and able to plan and organize their own development.

3. The presentation of the questionnaire research

The main objective of the research was to examine the professional development possibilities of teachers, highlighting the motivating and inhibiting factors. We were also interested in the teachers' opinion about the current legislation (credits system).

The **first hypothesis** assumed that teachers take part most often in trainings that develop skills and abilities. Our assumption proved to be true ($p < 0.005$); indeed, the interviewed teachers choose most often methodology trainings, and the last training was most often reported of methodological character.

The results do not reflect the approach shift (the transition to competency-based teaching). Although the trainings that develop skills and abilities can be used immediately in the classroom, and the results of the training output can be tracked in the learning results of students, they are less efficient in forming attitudes. The goal is to increase the attendance to self-knowledge and personal development trainings, and to create the route of a professional development that is planned with inner needs, strengths, weaknesses in mind.

The second hypothesis assumed that trainings are more accessible to and therefore *more frequently attended by teachers living in towns than teachers living in rural areas*. The assumption proved to be true ($p < 0.005$), indeed teachers living in towns participate significantly more often in trainings than teachers living in rural areas, which is presumably due to their better opportunities (more trainings; no need to travel; news come earlier about the trainings).

This means a major disadvantage for teachers living in rural areas, not only in terms of professional development but also in terms of career development possibilities (with new job applications the collected credit points are also of importance).

Examining **the third hypothesis** highlighted the *motivation factors* that promote professional development, and correlation between the teachers' level of education, age, number of years spent in the field and the motivation for participating in trainings.

According to the Friedman test results, teachers prefer trainings that are *professionally relevant* (skills and ability developing, methodological) and the ones that they find *interesting*. The third most frequently chosen motivation factor is the *credit points* of a training.

Examining the partial hypotheses, we found the following significant differences: teachers with high school degree choose significantly more often *trainings with credit points* and *professionally relevant trainings* (moreover, *any training opportunity that occurs*). We can assume that high school graduates intend to take any opportunity for their professional development (they enroll to what is professionally relevant or occurs as an opportunity) and for their keeping their job (credit offering trainings), because their counterparts with university degree have an advantage over acquiring and keeping a job.

Teachers with college degree choose significantly more often ($p < 0.05$) the *trainings that are interesting* than high school or university graduates. This shows a kind of self-confidence since they do not need to fight for the security of their job as their counterparts with high school degree. They are free to pick and choose among the trainings offered.

Teachers with university degree choose significantly less often ($p < 0.05$) the *trainings that occur as an opportunity* than their counterparts with high school or college degree. They choose trainings more consciously. This discretion is the feature of life-long learning; university graduates consider their professional development in the spirit of permanent learning.

In the further examination of age and motivating factors we found the following significant differences: teachers aged 31-40 choose significantly more often ($p < 0.05$) *credit offering trainings* than teachers aged 20-30 or 41-50. This may be due to the fact that they feel the most need of collecting points, since up to about the age of 30 (in terms of an average teacher career) the degree exams ensure the required credit points. After that time, however, it becomes important to collect the credits of activities that ensure professional development.

We also found that it is the teachers aged 41-50 who choose more often ($p < 0.05$) *the trainings for self-knowledge and personality development*, compared to their younger or older

counterparts. We think that in this age teachers have sufficient routine and an ample supply of professional devices so they have more energy for self-realization.

The examination of professional experience and motivating factors confirmed the above results. Indeed, teachers being in the field for 11-20 years choose significantly more often ($p < 0.05$) *the credit offering trainings* than their counterparts with less or more years, and teachers with less experience choose indeed significantly more often *free trainings* than their counterparts with more than 20 years experience. Similarly to the examination of age here we also found that teachers with more than 20 years experience choose significantly more often the trainings *for self-knowledge and personality development*.

The verification of **the fourth hypothesis** pointed out *the inhibiting factors* of professional development (money, time, family, opportunities) as well as the correlations between level of education, age, years in the field and the inhibiting factors.

The participating teachers ticked time and money as the most frequent inhibiting factors.

We found no significant correlation between the level of education (high school, college, university) and the inhibiting factors, likely because inhibiting factors are more externally determined than connected to inner traits.

We identified significant differences ($p < 0.05$) between the age of teachers and the inhibiting factors: only the 31-50 year olds feel that they have sufficient opportunities, while the younger and older people feel that *the opportunities* to promote their professional development are *insufficient*. According to the results, teachers at the beginning and at the end of their career own less professional self-confidence and drive than those in the middle of it. In our opinion these two age groups are in even greater need of trainings that develop personality and strengthen inner motivation.

Our assumption that young teachers (the 20-30 age group) will tick *money* as inhibiting factor significantly more often ($p < 0.05$) proved similarly true. A starting teacher salary hinders teachers' professional development, which could be avoided by different project application possibilities.

In accordance with our assumption, teachers aged 41-50 ticked *time* as inhibiting factor significantly more often ($p < 0.05$) than their younger or older counterparts, but *family* appeared as inhibiting motif at the 31-40 age group. We assumed that this is due to the fact that the time of childbearing has been postponed to the end of the 20s and early 30s, thus there are presumably more families with age between 31-40 who raise small children.

We found no significant correlation between professional experience and the *inhibiting factors*, but results show the same tendencies as with age: the inhibiting factor for teachers with 6-10 years in the field is the family; with more than 11 years is time; with less than 11 years is the opportunities; with 3-5 years is money.

Our **fifth hypothesis** proved to be true, according to which teachers may choose the trainings and opportunities that they need for their development (they are not sent by the school), and are satisfied with the usefulness of the trainings they have participated at.

Examining the 5a. partial hypothesis we learnt that there is no significant difference between the right to choose and the assessment of training usefulness.

Measuring the same from the viewpoint of the group averages we found confirming results: there is hardly any difference on the level of averages, that is, teachers in both groups (they choose, they are sent by the school) find trainings useful at the same extent.

In the **sixth hypothesis** we assumed that the majority of teachers do not agree with the legislation on their professional development and the collection of compulsory credits. We demonstrated this by the one-sample chi-square test ($p < 0.005$). The literature and research (Reis-Jorge, 2007; Ross and Bruce, 2007; Ross and Catherine, 2007; Högya, 2010; Bagdy, 1997) show that trainings are efficient when learning is driven by inner motivations. Therefore it may be worth thinking of inclining the approach shift in this direction.

In the **seventh hypothesis** we assumed that if a person is older or is in the field for a longer time, they have a more critical attitude towards legislation, that is, they are more *dissatisfied* with the regulations.

Using the discrimination analysis we revealed that both age and the time spent in the field have an impact on satisfaction. People who are dissatisfied with legislation are older and have been teaching for a longer time. We added as an explanation that older people as well as the professionally more experienced ones experienced the decentralization after the 90's, when they could finally breathe easily after the constraints of communism, so now it is more difficult to them to tolerate the new regulations.

4. The presentation of in-depth interviews data

After the processing and assessing the results of 35 in-depth interviews with teachers the following conclusions were formulated:

- teachers most often develop their professional skills by trainings, but they consider *sharing of knowledge with other teachers* the most important developing activity

(methodological workshops, partnerships, peer discussions). However, credit points can be collected mainly through trainings;

- they consider a professionally developing activity efficient if it *practical, usable, interactive, hold in their mother tongue, not too expensive, and innovative, approach-forming*;
- they consider a professionally developing activity unnecessary if it is expensive, boring, not usable, hold by unprepared trainers, compulsory, passive, only dictated theory, superficial, formality: organized for points, incomprehensible;
- most of the teachers *managed to collect* the required credit points, but after the degree exams this is more and more difficult to accomplish;
- all of them *firmly rejected* that the number of credit points judges or ranks teachers' work properly. What is more, except for one person, not even the accreditation of trainings is considered a „quality indicator“;
- confirming the questionnaire results, here also appeared money and time as *the most hindering factors* for professional development;
- related to teachers' professional development possibilities, the summarized opinions of the interviewees show that theoretically (at the level of legislation) the changes introduced for teachers' professional development indicate a right direction while the practical implementation indicates deficiencies and wrong directions. The interviewed teachers conveyed a *rather mistrustful attitude* towards the changes, and showed trust in themselves rather than in the „system“.
- the teachers imagined their own professional development based *ideally* on inner motivations: at own pace, in accordance with interest areas and needs, without credit points. In addition, they would like to have a system that assists them financially, with time and opportunities, where learning from each other (home and abroad), resting and burnout prevention would all play an important role.

The interviews with the seven interview providers revealed that they share the same opinion about the assessment of good or bad trainings ($p < 0.05$) as the teachers. Their position on accredited trainings and the collection of credit points is also similar. They are aware of the deficiencies of continuing education and acknowledge that the most efficient trainings would be the ones that base on inner motivations. However, accreditation means security to most of them.

5. Proposal

As the final step of our research we presented our proposal formulated on the basis of the study of literature and topic-related empirical researches, as well as the results of our research.

We thought that the continuing education of teachers cannot be discussed as a separate unit but as part of an overall whole. In formulating the proposals we based on the complex model of the assistance of teachers to catch up with new ideas (see chapter entitled *Models of teacher continuing education*), with a short outlook on the basic and continuing education systems of teachers in Europe.

The first step of the model proposes that the application to university should be subject to certain conditions. We suggested the introduction of a filtering exam that, similar to the Finnish model, does not measure the candidates' theoretical knowledge but investigates the existence of fundamental pedagogical skills and abilities (situational exercises, mental aptness).

The second part concerned the basic education. Based on the results of the focus groups and the foreign good practices we suggested self-knowledge and self-development activities at least in the first two semesters of the basic education. On the one hand, these would consist of encounters based on own experiences and led by professionals. On the other hand, they would ensure the practicing of activities that form the foundations of life-long professional development (self-reflection, intervision). In addition, to increase the efficiency of basic education, we suggested the intensification of the internship programs, a closer cooperation with teachers in schools which ensure internship, and the implementation of joint projects and researches.

The third step of our proposal aimed at the increase of training efficiency. A key suggestion is the reconsideration of the credits system as a quality assessment system since the collection of points, according to our research results, does not help, but rather hinder the professional development of teachers.

In addition, we find it necessary to prepare teachers to plan and track their professional development. In our opinion the development of their self-knowledge, the identification of their professional strengths and weaknesses, and the drafting of constructive criticism on their own and colleagues' classroom practice is required. Similarly, the possibilities for their professional development should be presented – based on the Avalos-model these are the mentoring, self-reflection, efficient usage of technical equipments, non-formal trainings,

workplace facilitation and the creation of a supportive school culture –, since many teachers are unaware of them, as the results of the questionnaires revealed.

In the next part of our proposal we discussed the support of participation in trainings (the presentation of possibilities; assisting financially and with time) and the importance of learning driven by inner motivations, based on foreign good practices and the results of our research.

The last part of our proposal concerned the strengthening of trainings and other professional activities by follow-up to accomplish an effective change. There are plenty to learn from follow-up encounters. On the one hand about the solutions found to different problem situations, on the other hand about the variety of application possibilities of the studied items.

As far as the training providers and their offers are concerned, follow-ups would give the opportunity for long-term assessment of training efficiency and the remedy of deficiencies. As for in-school trainings, the institutions can require follow-up, or realize them in the form of intervision.

Limitations of the study

The study explores a complexity of issues that can be interpreted in many ways (from sociological, pedagogical, political, economical points of view), therefore we found it difficult to follow a limited path. Similarly, the topic itself represents a broad area, thus its narrowing would have ensured the deepening and quality improvement of the study.

The methodological richness of the research (document analysis, focus groups, questionnaires, in-depth interviews) proved to be a too big challenge, so not all of the received information was processed in the present study.

Future research possibilities

In the long run primarily the unprocessed material of the questionnaires and of in-depth interviews could be subjected to further analysis.

We find it worth keeping track of the development of the Romanian continuing education system and to analyze the changes presented in our study (mentor system; credits system; portfolios as devices to examine the efficiency of professional development) within a few years.

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