

AN EXPLORATORY STUDY ON THE STRUCTURING OF THE FACTORS IMPLIED IN TEACHERS 'CONTINUOUS PROFESSIONAL DEVELOPMENT

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Abstract: *Professionalism and expertise in the professional domain represent conditions of a successful professional career. The initial professional formation and development are not sufficient anymore, they are included in a lifelong learning process. The specialty literature affirms that teachers' professional expertise is reflected not only at the student's level (student learning and achievement of students), but also at the level of education quality. The present study proposes to identify the relation between the internal factors such as personal characteristics and teacher attitudes toward professional development activities and external factors and teachers' participation to continuous formation programs. The implications of the study can be found at a methodological level, through the identification of the important factors which influence the teachers' professional development and also at a practical-operational level, through the development of teachers' continuous formation policies which would lead to a rise in the level of the participation rate in the continuous formation programs.*

Keywords: *professional development; initial and continuous teacher educations; competences; predictors; life long learning;*

1. Introduction

In a society of permanent changes, professional development becomes a necessity with a view to adapt to the social life demands. Teachers play a crucial role in supporting the learning experience of young and adult learners, being the promoters of lifelong learning and also the providers of quality in education. Teachers have to adapt continuously to the knowledge-based society – to form and train human resource appropriately in order to develop the capacities to create new technologies. Within this context, teachers have to acquire abilities and knowledge which have to be developed continuously. Also, they are responsible „to extend the boundaries of professional knowledge through a commitment to reflective practice, through research, and through systematic engagement in continuous professional development from the beginning to the end of their careers”. (Scheerens, 2010).

Policies assumed by the states of European Union on the issue of teachers' education became coherent and structured in thematic areas such as: *a continuum of teacher education, professional values, qualifications for teaching, supporting teachers and school leadership*, for the purpose of developing professional competencies necessary in the new knowledge-based society (Scheerens, 2010). It has thus been necessary that teachers' professional formation should meet superior standards in quality, based on a performant integrated initial formation and continuous professional development which would offer them the possibility of a high professional qualification; this will develop a wide range of professional competencies leading to autonomy and professional judgment leading to the possibility to adapt to new requirements of the knowledge-based society.

In Romania, the teachers' professional development activity includes the initial formation stage organized at university level (for all categories of teachers), with the aim of

forming the main competencies necessary to professional insertion. The stage of continuous formation targets the development of those professional competencies which ensures a better adaptation of educational services to the current challenges of schooling. Continuous formation ensures the updating and development of teachers' competencies, including the acquisition of new competencies according to the educational needs and to the national curriculum plan, as well as according to the exigencies regarding the adaptation of staff competencies to the changes of educational structures/ processes (Șerbănescu, 2011). Self-formation represents a consequence of the formation system (initial-continuous), being a result of the innovative changes promoted within the educational process, of pedagogical research finalized at the level of didactic practice. (Cara, 2006).

Teachers' continuous formation became one of the main preoccupations of the educational and research policies of many countries. In the European Union, teachers' continuous formation became obligatory in 11 states. Romania legalized through LEN 1/2011 the compulsoriness of refresher courses for the teaching staff in the pre-university system every 5 years by cumulating a number of 90 transferrable credits. The offer of professional formation service suppliers for teachers (universities, Teachers' Association, NGO, private companies) became very diverse, with multiple options in the choice of continuous formation programs they wish to attend according to their own formation needs. UE and OCDE studies confirm the fact that, in Romania whereas there is a fund allotted through the state budget to continuous formation, owing to a lack of substitute teachers and the costs of providing for substitute teachers, teachers are often unable to participate in professional development activities during working hours (Euridyce, 2008).

2. Teachers' continuous professional development

Most studies in the specialty literature confirm the idea that quality in the teacher's educational act has a lot of implications in the learning and achievement process of the learner. Thus, teachers are responsible in the achievement of a quality education, carried out at highest professional standards.

Professional development is approached in the specialty literature as the body of systematic activities to prepare teachers for their job, including initial training, induction courses, in-service training, and continuous professional development within school settings.

The conceptual approach of teachers' professional development will refer in the present study only at continuous professional formation, being defined as "activities that develop an individual's skills, knowledge, expertise and other characteristics as a teacher" (OECD, 2009, p.49). Continuous professional formation focuses on the development of individual professional competencies in order to increase the efficiency of the educational act, thus facilitating dynamic changes in education (Blandford, 2000).

Being aware of the need for quality education, teachers engage in refresher courses and development programs with the view to obtain new professional skills in the specialization domain as well as in the pedagogical or methodology field; in professional conversion programs for new specializations, in programs which help them to reskill and acquire complementary competencies in order to help them extend the current activities (computer-assisted teaching, teaching in a foreign language); in programs of development and broadening transversal competencies on the subject of interaction and communication with the social and pedagogical environment (organization, management and improvement of strategic performances of professional groups, self-control and reflexive analysis of own activity) (Șerbănescu, 2011). Therefore, continuous formation programs teachers can attend are oriented in order to help them along the whole length of the professional pathway.

Also, teachers' continuous professional formation does not imply only their personal development (individualized learning) but also staff development (peer learning or cooperative learning in groups) leading to school development (Bell, 1991).

3. Predictors of teachers' participation to continuous formation programs

The problem under debate in this study refers to an analysis of the low level of teachers' participation to continuous formation programs in Romania. For an abstract foundation of the study, we tried to find theoretical explanation concerning teachers' participative behaviour at their own professional formation.

Research in the professional formation domain identify a variety of factors which can have hindering or encouraging effects as regards teachers' participation to continuous formation activities: time, finances, job and family responsibilities, heavy work load, school culture and principal school and colleague.

To that effect, specialty literature refers to two large categories of factors: internal factors (*teachers' attitudes toward professional development and teachers' self-efficacy*) and external factors (*time, funding, principal influence, colleagues influence and school culture*). Villegas- Reimers (2003) stated that conceptual, contextual and methodological factors that contribute to a successful professional development programme. Kwakman (2003) identify in an empirical study carried out in Netherlands three categories of factors which affect teachers' level of participation to continuous formation activities: *personal factors* (professional attitudes, appraisals of feasibility, appraisals of meaningfulness, emotion exhaustion, loss of personal accomplishment), *task factors* (pressure of work, emotional demands, job variety, autonomy, participation), and *work environment factors* (management support, collegial support, intentional learning support). It seems that the factor which represents the most significant effect is the personal factor. Without identifying a certain category, Wilson & Cobette (2001) found the most important hindering factors including time constraints, financial constraints, distance, information gaps, and lack of face to face interaction and mismatch of goals.

Desimone (2009) identified the teacher characteristics as prior experience, content knowledge, beliefs and attitudes. Amos & Benton (1988) found that teachers' negative attitude can be a barrier in participating to own professional formation.

Banks & Smith (2010) identified some teacher characteristics such as gender, age and experience of teaching as the determinants of teacher participation in continuous professional development. Lohman (2006) considers that an important predictor of the level of professional formation is represented by the variable time and its implications in the life of every individual. Also, he refers to another external factor in his studies – *funding*, which can have a hindering or encouraging effect. If the participation to the professional formation program brings a financial incentive to the salary, this can be considered an encouraging factor. The analysis cost-benefit of the involved variables (time, funding) can represent a cumulative effect in participating to professional formation activities. At the same time, in his study, Lohman (2006) has found that self-efficacy is one of the most important factors affecting teachers' participation in learning activities. School culture, colleague influence and principal leadership can also affect teacher learning.

Lohman and Woolf (2001) found that the work environment of teachers influences their participation in learning activities. Having a learning culture, common understandings, visions, and shared values among teachers in schools is important both for building a supportive school culture and for ongoing teacher professional development (Bayar, 2013). Another category of factors – factors of personal characteristics, which specialty literature

underlines as being age, gender, teaching experience (Torff & Session, 2008; Ozer & Beycioglu, 2010) can influence teachers' attitudes towards continuous formation programs.

3. Methodology

3.1. Aims

The main purpose is to identify the contribution of internal and external factors in teachers' participation to continuous formation programs. At the same time, we wish to establish the psychometric characteristics of the questionnaire on the issue of teachers' attitude towards continuous professional development.

3.2. Sample

The sample of the research is made up of 73 teachers from primary and preschool education units in the Arges, Olt, Teleorman and Valcea districts, 128 females and 12 males, having a didactic experience between 3 and 40 years. The questionnaires were administered in a paper-pencil format, the participation being voluntary.

3.3. Instruments

The present exploratory study represents a pilot study which aims at identifying the weight of certain variables which facilitate or hinder teachers' participation to professional development programs. The data of the research had been collected through questionnaires built by us, administered to subjects during a time span of 2 months.

1. The initial questionnaire measures teachers' attitude towards continuous professional development – CA-DPC. The questionnaire had been built according to some theoretical models from the specialty literature. The targeted dimensions are: internal factors (*teachers' attitudes toward professional development, teachers' self efficacy*) and external factors (*time, funding, principal influence, colleague influence, school culture*).

The strategy of item construction was a rational one. In item construction we tried to keep the demands of surface and semantic characteristics of the items and we studied item differentiation in different categories: action, evaluation, observation. We tried to achieve a balance in the number of items of each dimension. The quotation of answers is achieved on a four-point Likert scale (strongly disagree, disagree, agree, strongly agree) because this preserves the uniformity of answer variance and does not allow a convenient, avoidable medium variant for participants. Answers are scored with 1, 2, 3, 4 points according to the rank ascribed for the chosen answer variant. In its initial form, the questionnaire included a number of 60 items. This form had been applied to a number of 50 participants, who met the sampling conditions. After calculating the internal consistency, the number of items was reduced to 40, which led to a rise in internal consistency and to an easier filling of the questionnaire.

2. In order to measure the level in the participation of professional development activities, participants were asked to select the professional development activities they had been involved during the last year, with the exception of obligatory activities.

4. Results

4.1. Reliability of the CA-DPC

We used the statistical procedure by calculating the internal consistency index (the degree to which the results obtained by subjects at each item correlate with total results on

each factor) and the Alpha Cronbach coefficient (the degree to which items correlate with each other at a sufficiently high level in order to affirm that they measure the same concept).

Table 1. Cronbach's Alpha coefficients for the *CA-DPC*

Subscales	No of items	α for *
I. Internal factors		
1. <i>teachers' attitudes toward professional development</i>	7	.88
2. <i>teachers' self efficacy</i>	6	.85
II. External factors		
3. <i>time</i>	6	.69
4. <i>funding</i>	6	.54
5. <i>principal influence</i>	5	.87
6. <i>colleague influence</i>	5	.77
7. <i>school culture</i>	5	.62
	<i>TOTAL</i>	30

Note: *N=50

4.2. Relation between the study variables

The exploratory analysis was realised separately on each type of factor. In order to identify the influence of the internal factors, also of the external ones to explain the degree of participation to the continuous professional development activities. We have proposed to use the Multiple regression model through the Enter Method. In the preliminary phase of this step there have been checked the normality of distribution, linearity and orthogonality between the predictor variables.

The analysis was made separately, on each level – relation between internal and external factors and participation to continuous professional development activities. The exploratory statistical analyses led to the following results:

Table 2. The exploratory analysis of internal and external factors involved in the participation to continuous professional development activities.

Factors	<i>R</i>	ΔR^2	<i>F</i>	β	<i>B</i>	<i>SE b</i>	<i>t</i>	<i>sig.</i>
I								
I. Internal factors								
<i>teachers' attitudes toward professional development</i>	.786	.618	14.569	.475	1.094	.426	2.566	.019
<i>teachers' self efficacy</i>				.398	1.368	.398	2.148	.032
I.a. Personal factors								
<i>gender</i>			16.09	-.234	-21.651	12.977	-.234	0.099
<i>age</i>	.611	.374	9	.702	3.019	.477	6.332	.000
<i>teaching experience</i>				-.265	-2.410	1.082	-2.227	.029
II. External factors								
<i>time</i>				.751	4.573	1.176	3.891	.005
<i>funding</i>	.625	.390	16.278	.176	2.030	1.719	1.181	.086
<i>principal influence</i>				.054	.422	1.480	.285	.783
<i>colleague influence</i>				.452	3.785	1.007	2.128	.024
<i>school culture</i>				.167	2.171	2.178	.997	.348

Note: * $p < .05$, ** $p < .01$, $N = 85$

5. Discussion and conclusions

The present pilot study analyzed teachers' attitude towards continuous professional development, through the identification of the weight of internal and external factors which facilitate participation to continuous professional development activities.

The category of internal factors includes factors such as *teachers' attitudes toward professional development* and *teachers' self efficacy*, and the external factors mention factors such as *time*, *funding*, *principal influence*, *colleague influence*, *school culture*.

The statistical analysis of collected data showed the following:

- Significant relations had been identified between teaching experience and participation to continuous professional development activities, namely the more considerable experience the higher attitude towards his/her own continuous professional development. This relation can be explained through the fact that the teacher can achieve the self-evaluation of his educational act more easily so that he becomes aware of the necessity to develop and improve his professional competency system; also, significant relations had been identified between biological age and participation to continuous professional development activities
- Unsignificant relations had been identified between gender and the level of participation in continuous formation activities;
- As regards the internal factors, positive relations had been identified at both *teachers' attitudes toward professional development*, and *teachers' self efficacy*. We observed that teachers' positive attitudes towards personal continuous development determine their implication in personal development activities. Concurrently, results confirmed the findings of Lohman's study (2006) who has found that self-efficacy is one of the most important factors affecting teachers' participation in learning activities. Participation in the continuous formation programs are determined by teachers' beliefs in their own learning skills;
- As regards the external factors, we identified positive relations concerning *time* and *colleagues influence*. Any significant relations had been identified as regards *funding*, *school culture* and *school manager influence*. The results of our study conform partially with specialty literature. Concerning the variable *time*, this is associated with positive values in the participation level to continuous professional formation activities. Teachers who can manage their professional time efficiently are open to participate to professional formation activities. It would be interesting to identify in a future study if the variable self-efficacy influences this relation. Colleagues' participation in professional development programmes influence positively participation in continuous formation activity. Even if school organization in Romania is still tributary to autocratic management, it seems that the wish to participate to professional development activities is not influenced by the school manager or by school culture but especially by colleagues. The identified results can be explained at the level of two aspects: school managers in Romania are rather engaged by bureaucratic activities instead of enforcing respect as leaders with persuasive qualities and influencing subordinate staff opinion.
- Concerning the variable *school culture*, this suffered a lot of inconveniences during the last period in Romania, as it has been transformed into an individualistic type of culture or it has been unstable due to a considerable staff fluctuation. Perhaps the most surprising result identified in this study is the insignificant relation established between the variable *funding* and teachers' participation to professional development programs. Foreground directions in Romania in the latest years have been the increase in the quality of human resource and the educational sector was a part of it. Important funds had been accessed which

had been invested in teachers' formation activity. By participating to these programs, teachers accumulated the obligatory transferrable credits.

Even if the results of the study cannot be generalized due to the sample size on one hand and to the insufficient testing of the psychometric quality of the instruments used on the other hand, the idea of the present study can represent a reference point in developing awareness campaigns for continuous professional development programs, seen not only as a compulsory activity but also as necessity rooted in the concrete reality of phenomena identified in school.

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