

OPERATIONAL MODEL FOR THE DEVELOPMENT OF METHODOLOGICAL COMPETENCES AT BEGINNING TEACHERS

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Abstract

The purpose of this research is to build the operational model of developing of methodological competences at beginning teachers. Our study focuses on the following of two objectives: the content analysis of theoretical models and educational policies at national and international level regarding to the methodological competences and the identification of the specific categories of competences that will form the operational model. The paper consists of an ascertained research developed, since 2010. The content analysis of the theoretical models and educational policies emphasizes the number of specific themes of methodological competences. After applying of content analysis there are result the categories and subcategories of methodological competences: formulation of operational objectives, the selection of contents, the development of teaching strategies, the assessment design strategy, design teaching. The operational categories of competences were surveyed of expertise of a group of 30 specialists in the field of Educational Sciences from university education. There are present the results of semi structured interview for capturing the characteristic elements that define the operational model to develop methodological skills at beginning teachers. This study provides both theoretical results, through building of the operational model at general level, but statistical data about the types of methodological competences involved at beginning teachers training at particular level.

Key words: operational model, methodological competences, beginning teachers

I. Current perspectives on methodological competences at beginning teachers

Teacher competence is defined as the ability of a teacher to deal adequately with the demands of the teaching profession using an integrated set of knowledge, skills and attitudes as manifested in both the performance of the teacher and reflection on his or her performance (Nijveldt, M., Beijaard, D., Brekelmans, M., Wubbels, N.V.T., 2005). The pedagogical competence refers to a set of cognitive, affective, motivational and managerial skills of the educator personality, giving it the qualities needed to perform a benefit educational to ensure the realization of goals designed the vast majority of students (Jinga, I., 1998, p. 78). These definitions emphasizes the significance of the teacher's ability to reflect upon his or her own teaching practices as teachers are only competent when they are able to reflect upon their own teaching practices and hence their professional development in addition to being able to teach well. These definitions of teacher competence were thus taken, in addition to the aim of stimulating the professional development of beginning teachers within the domain of methodological competence, as the starting point for the elaboration of operational model.

The several well-accepted theories argue that teacher competence develops and is refined throughout a series of stages (Steefy, Wolfe, Pasch & Enz, 2000). Each of these *stage models* refers to an early period of teaching performance which represents beginning teacher status.

Examination of the literature concerning teaching competence reveals a multitude of terms used to describe excellent teaching. Research in this area includes that pertaining to:

- good teaching (Brown and McIntyre, 1993);
- effective teaching (Cooper and McIntyre, 1996; Kyriacou, 1997);
- creative teaching (Woods and Jeffrey, 1996);
- quality teaching (Stones, 1992).

A 1994 study by the Organization for Economic Co-operation and Development (OECD) was based on the view that teaching quality should be regarded as a holistic concept, comprising competencies across five key dimensions:

- knowledge of substantive curriculum areas and content;
- pedagogic skill, including the acquisition of and ability to use a repertoire of teaching strategies;

- reflection and the ability to be self-critical, the hallmark of teacher professionalism;
- empathy and the commitment to the acknowledgement of the dignity of others;
- managerial competence, as teachers assume a range of managerial responsibilities within and beyond the classroom (OECD, 1994).

One of the most recent studies of effective teaching is the *Hay McBer Report* (DfEE, 2000) which argues that there are three main groups of factors within the control of the teacher that influence student progress. These are termed *teaching skills*, *professional characteristics* and *classroom climate*. Each category consists of hierarchical lists of desirable dispositions, qualities and behaviors.

Novice teachers tend to need additional knowledge and support in the areas of classroom management, lesson planning, comprehension of curriculum, school policies and procedures, and effective communication skills with students, parents, and fellow teachers (Brock, B., Grady, M., 1998, 2007; Renwick, L., 2007).

The beginning teachers need three basic kinds of support: *personal, social and professional* (*Developing coherent and system-wide induction programmes for beginning teachers: a handbook for policymakers*, 2010, p. 17). Professional support is aimed at developing the beginning teacher's competences (in pedagogy, didactics, subject, etc). This support might focus on the development of effective classroom skills and deepening the knowledge of subject, pedagogy and didactics. Professional support should provide opportunities for a wide variety of activities, as learning styles of teachers differ: they may learn individually through reading, experimenting and reflecting, and jointly through collaboration.

The papers and the studies realized at the internationally level in the field of professional competences at beginning teachers approach the concept of professional competence. The specific categories of professional competence are not defined. The methodological competences can be found in concrete terms with the other subcategories, such as communication and relationship competences or classroom management.

There are a number of researchers working on the teaching competences, yet no consensus has been reached on the teaching competences (Aydogdu, E., 2007). What is more, the studies on teaching competences are mainly on general teaching competences, and these general competences may not fit well to specific disciplines.

There are also concerns in Romanian pedagogy for approach of professional competences at teachers.

M. Diaconu (2002) presents in summary, the main tasks that has an effective teacher: clearly establishes the educational objectives that to be carried out; identify and design relevant learning activities for the real life contexts of students; is concerned with the selection of training strategies and learning materials in concordance with the age, the previous training, the cultural values and the individual learning needs of students; creates and maintains a climate that encourage the learning in the classroom.

The pedagogical competence is made operational in five specific competences (Gherghinescu, R., 1999): *cognitive competence*, which includes intellectual abilities and knowledge expected of a teacher; *emotional competence*, defined by the attitudes expected of teachers and considered to be specific for didactic profession, as the most difficult to obtain; *exploratory competence*, which aims the level of pedagogic practice and offers the opportunity for future teachers to practice their didactic abilities; *competence related to performance*, which proves not only that teachers know well that they can use what I know; *the competence to determine observable changes* at students the following pedagogic relationship.

The framework of professional competences in Romania includes six categories of competences (Gliga, L., 2003): *methodological, communication and relationship, student assessment, psycho-social, technical and technological, career management*. The methodological competences are following:

- appropriate use of concepts and theories of science education (interdisciplinary approaches, general and specialty didactic, psychology, education philosophy, the new education in the "knowledge society");
- applying concepts and modern theories regarding on knowledge capacity building;
- design of instructional and educational contents;
- appropriate organization of didactic activities in function of the dominant lesson type;
- use of teaching methods and strategies closely related to the individual/ group particularities and the purpose or the type of lesson;
- setting materials and teaching aids used in learning activities;

- optimum use of space-time factors for the efficiency of the educational process;
- manifestation of an innovative methodological conduct in professional plan;
- achievement of instructional and educational activities.

The methodological competences represent from our point of view the instrumental, procedural and operational component. We give further examples of general methodological competences: designing learning activities for large, medium, short times; use knowledge of pedagogy and specialty didactic for design of curriculum at school decision; designing, organizing and realizing educational activities from curricular perspective; use of teaching strategies in accordance with the curricular cycle, the objectives and the type of lesson; resources management for efficiency of didactic approach.

In the practice of our work there are developed the operational model of methodological competences. The elaboration of model is based on several steps: setting the general categories of methodological competences, detailed description of specific competences for each general category, making concrete examples and observable behaviors for beginning teachers.

II. Research on developing the operational model of methodological competences at beginning teachers

II.1. The objectives and hypothesis

The objectives

The first objective of this study is the analysis of theoretical models and educational policies from Romanian educational system. We analyze these aspects having in mind the methodological competences.

The second objective is to determine the specialists' representations towards the operational model of methodological competences at beginning teachers.

THE HYPOTHESIS OF THE INVESTIGATION

The first hypothesis

The theoretical models and educational policies included the aspects regarding to the methodological competences, at the level of the five indicators: educational process, curricular innovations, education finalities, teaching strategies and didactic activity design.

The second hypothesis

The experts from the domain of Education Science identify original and concret ways of adapting the operational model of the

methodological competences at the particularities of teachers beginners.

II.2. Variables

In the case of the content analysis, *the dependent variable* is represented by the categories of indicators, while *the independent variables* are: the theoretical models and educational policies.

In identifying the subjects' representations, *the dependent variable* used is the appreciation of the importance of the aspects concerning methodological competences. In order to establish this variable, the subjects were asked to evaluate each dimension, according to its importance.

II.3. Subjects

30 specialists from the domain of Education Science were involved in this study.

II.4. Methodology

In order to identify the categories of methodological competences, *the content analysis* (Agabrian, M., 2006) was used in order to distinguish the themes and the specific categories that correspond to each indicator.

The main instrument that was used for the specialists' representations towards the operational model of methodological competences at beginning teachers was *semi structured interview* (Antonesei, L., 2009).

II.5. Data presentation and Analysis

The first hypothesis is confirmed because the theoretical models and educational policies included the aspects regarding to the methodological competences, at the level of the five indicators: educational process, curricular innovations, education finalities, teaching strategies and didactic activity design.

The qualitative analysis of documents contributes at establishing the main categories of methodological competences. It follows five basic categories that form the basis for the operational model of methodological competences (*tab. 1*): the functionality of the educational process, the curricular innovations, the finalities of education, the teaching strategies, the teaching activity design.

Table 1

The categories of methodological competences

Themes	The frequency of specifications
the functionality of the educational process	19
the curricular innovations	24
the finalities of education	46
the teaching strategies	53
the teaching activity design	44

The second hypothesis is confirmed, because the experts from the domain of Education Science identify original and concret ways of adapting the operational model of the

methodological competences at the particularities of teachers' beginners.

The qualitative analysis of obtained results from the application of interview contributes at

representation of the operational model of the methodological competences at the beginners teachers (*tab. 2*).

Table 2

The operational model of the methodological competences at the beginners teachers

Specific competences	Observational behaviors
1. to ensure functionality of the educational process	1.1. combining the <i>forms of education</i> in the learning activity
	1.2. ensuring interaction between the <i>components of education</i>
	1.3. compliance of exigencies of <i>didactic principles</i>
2. to exploit the curricular innovations	2.1. application of <i>types of curricula</i> developed at national level
	2.2. analysis and selection of <i>curricular documents</i> in relation to students' interests
	2.3. application of new <i>ways of contents organization</i>
3. to operate with the finalities of education	3.1. selecting <i>general and specific competences</i> in the school schedule
	3.2. establishing the <i>goal of lesson</i> based on general and specific objectives
	3.3. formulation of <i>operational objectives</i> for a lesson
4. to use teaching strategies	4.1. applying various <i>methods of teaching and learning</i> in formal and non-formal context
	4.2. selecting and realization of <i>didactic instruments</i> according to teaching and learning methods
	4.3. establishing the <i>organization forms</i> of students for achieving goals of lesson
5. to project the teaching activity	5.1. <i>designing formal didactic activity</i> at four levels: annual, quarterly, of the learning unit, of lesson
	5.2. scenario selection stages, objectives, content, teaching-learning strategies, depending on the <i>type of lesson</i>
	5.3. <i>designing non-formal educational activities</i> using various tools

CONCLUSIONS

The research results have contributed to the delineation of the relevant categories of methodological competences and development of the operational model regarding these competences for beginning teachers.

BIBLIOGRAPHY

- Agabrian, M., 2006** - *Analiza de conținut*, Editura Polirom, Iași.
- Antonesei, L. (coord.), 2009** - *Ghid pentru cercetarea educației*, Editura Polirom, Iași.
- Aydogdu, Egemen, 2007** - EFL teachers' perceptions of foreign language teaching competences, Trakya University, Institute of Social Sciences.
- Brock, B., Grady, M., 1998** - *Beginning teacher induction programs: The role of the principal*, Clearing House, 71(3), 79-83.
- Brock, B., Grady, M., 2007** - *From first-year to first rate: Principals guiding beginning teachers*, Thousand Oaks, CA, Corwin Press.
- Brown, S and McIntyre, D., 1993** - *Making Sense of Teaching*, Open University Press, Buckingham.
- Cooper, P. and McIntyre, D., 1996** - *Effective Teaching and Learning*, Open University Press, Milton Keynes.
- Diaconu, M., 2002** - *Competențele profesiei didactice*, în *Standarde profesionale pentru profesia didactică*, Editura POLSIB, Sibiu.
- Gherghinescu, R., 1999** - Conceptul de competență didactică, în Marcus, S. (coord.), *Competența didactică*, Editura All, București.

Gluga, L., 2003 – *Standarde profesionale pentru profesia didactică*, M.E.C., București.

Jinga, I., 1998 - *Competența profesională a educatorilor*, în Jinga, I., Istrate, E. (coord.), *Manual de pedagogie*, Editura ALL Educațional, București.

Kyriacou, C., 1997 - *Effective Teaching in Schools: Theory and practice*, Stanley Thornes, Cheltenham.

Nijveldt, M., Beijaard, D., Brekelmans, M., Wubbels, N.V.T., 2005 - Assessing the interpersonal competence of beginning teachers: The quality of the judgment process, *International Journal of Educational Research*, Volume 43, Issues 1-2, 89-102.

Renwick, L., 2007 - *Keeping new teachers happy*, District Administration, 43(1), 26.

Steffy, B., Wolfe, M., Pasch, S. and Enz, B., 2000 - *Life cycle of the career teacher*, Kappa Delta Pi and Corwin Press, Thousand Oaks.

Stones, E., 1992 - *Quality Teaching: A sample of cases*, Routledge, London.

Woods, P. and Jeffrey, B., 1996 - *Teachable Moments: The art of teaching in primary schools*, Open University Press, Buckingham.

*****, DfEE, 2000** - *Hay McBer Report*, DfEE, London.

*****, 1994** - OECD (Centre for Educational Research and Innovation), *Making Education Count: Developing and using international indicators*, Organization for Economic Co-operation and Development, London.

*****, 2010** - *Developing coherent and system-wide induction programmes for beginning teachers: a handbook for policymakers*, European Commission Staff Working Document SEC (2010) 538 final.