

Exploratory Approach on Identification the Dimensions of Pedagogical Competence

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Abstract

Keywords:

pedagogical competence; teacher training programs; dimensions of pedagogical competence; teacher training; professional development of teachers.

In their activity in schools - regardless of the years of teaching experience and the opportunities to practice teaching skills - teachers need to constantly improve their pedagogical competence. Working directly with the students leads to an observation of their evolution, from one generation to another, but at the same time to an identification of imprint that socio-cultural field's evolution puts on them and on their training needs in school. Teachers identify these wishes because, after all, the school must be connected to the demands of the social environment in which it operates. As a result, we believe that trainers need to recognize components of pedagogical competence and this fact will lead to a deeper awareness of skills they have to master, those they should develop or improve continuously in order to obtain visible formative achievements within the school, but also their professional identity. Our approach presents results of a focus group based on mapping main components of pedagogical competence. Therefore, present article emphasizes on importance of these skills; based on the results obtained through focus group conducted on teachers and pupils, we identify the main dimensions that compose pedagogical competence. In the end, we established ways to develop these competences integrating actions from teachers training programs.

Zusammenfassung

Schlüsselworte:

Pädagogische Kompetenz; Lehrerausbildungsprogramme; Lehrerfortbildung; Dimensionen pädagogischer Kompetenz; Berufliche Weiterbildung von Lehrern.

In ihrer Tätigkeit an Schulen müssen Lehrkräfte – ungeachtet der langjährigen Unterrichtserfahrung und der Möglichkeiten zur Einübung pädagogischer Fähigkeiten – ihre pädagogische Kompetenz ständig verbessern. Die direkte Arbeit mit den Schülern führt zu einer Beobachtung ihrer Entwicklung von einer Generation zur nächsten, aber gleichzeitig auch zu einer Identifizierung der Prägung, die die Entwicklung des soziokulturellen Bereichs auf sie und ihren Ausbildungsbedarf in der Schule hinterlässt. Lehrer erkennen diese Wünsche, denn schließlich muss die Schule mit den Anforderungen des sozialen Umfelds verbunden sein, in dem sie tätig ist. Daher glauben wir, dass Trainer Komponenten pädagogischer Kompetenz erkennen müssen, und diese Tatsache wird zu einem tieferen Bewusstsein für Fähigkeiten führen, die sie beherrschen müssen, die sie kontinuierlich entwickeln oder verbessern sollten, um sichtbare Bildungserfolge innerhalb der Schule zu erzielen, aber auch ihre berufliche Identität. Unser Ansatz präsentiert Ergebnisse einer Fokusgruppe, die auf der Abbildung der Hauptkomponenten pädagogischer Kompetenz basiert. Daher betont dieser Artikel die Bedeutung dieser Fähigkeiten; Basierend auf den Ergebnissen der Fokusgruppen, die mit Lehrern und Schülern durchgeführt wurden, identifizieren wir die Hauptdimensionen, aus denen sich pädagogische Kompetenz zusammensetzt. Am Ende haben wir Wege gefunden, diese Kompetenzen zu entwickeln, indem wir Maßnahmen aus Lehrerausbildungsprogrammen integriert haben.

1. Introduction

Pedagogical competencies require the configuration of teachers' efforts in order to understand the learning process experienced by students, to obtain an anticipatory vision regarding the future of the educational process and to build a reflexive pedagogical strategy. This implies the continuous development of teachers' competence and an increased interest in instructional design activities.

Inside one socio-educational context that requires constant adaptation on the part of teachers, teacher

training programs can be sized in such a way as to respond to these needs of permanent training.

Identifying the main dimensions of pedagogical competence would be an important step in this endeavor because they can give a functional meaning to any didactic action.

In the past years, worldwide, there has been an increase interest in concerns for changing the teacher training programs and for adjustment of curricula according to development at social and cultural level. Such kind of context has required the adaptation of

teachers' skills that must be rethought in pedagogical training system, in such manner the need for pedagogical competence training has emerged.

Teacher training programs have a double role: it helps to develop the professional and scientific skills of future teachers, but also to build an effective learning path for students. At the same time, primary goal of a teacher training program is to prepare for the future, not only for the present educational challenges.

2. Theoretical foundation

Competence develops through the individual increasing of multiple learning opportunities (Kunter et al, 2013) and can be moderated by the specific characteristics of each person.

Teacher's pedagogical competence reflects his ability in terms of holistic and innovative approach to instructional process, but also the contributions he can make to development of learning in formative approach. Recent studies reflects that there is an influence of professional competence and pedagogical competence on teacher performance (Murkatik et al, 2020). Competent teachers are considered to be those who have acquired knowledge and skills important for their professional training.

Pedagogic competence can also be described as teachers' availability to apply one set of knowledge, skills and attitudes (From, 2017) that could enhance the achievement of educational objectives, respecting the limitations of learning context.

Pedagogical competence is a construct that varies from one individual to another and that includes cognitive, motivational and self-regulatory characteristics that describe the teaching profession and are necessary for successful practice in order to provide a higher level of performance to teaching process.

Some studies offer integrative interpretations for the following areas of pedagogical competence (Roelofs, Sanders, 2007):

- Interpersonal competence - creating a friendly and open communication climate;
- Psychological skills - creating a safe learning environment from psychological perspectives;
- Competence related to didactic and scientific knowledge - ability to guide students through educational knowledge;

- Managerial competence - building a strict organized climate for carrying out the didactic process;

- Cooperation with colleagues - adapting personal activity to that of colleagues in order to contribute to institutional development;

- Establish a solid partnership between school, family and social environment;

- Ability to reflect on teacher's own ability and maintain a high professional level by connecting to current standards.

Another framework for pedagogical competences includes the following elements (Mohamed et al, 2017; Mc Ber, 2000; Anderson, 2002):

- knowledge of the curriculum and the subject matter/content;

- skills for planning instructional process and didactic strategies;

- effective use of didactic materials and educational technologies to improve the learning process;

- assuming the principles of learning developed in a personalized and individualized manner;

- effective management of learning context components;

- knowing the individual characteristics of the trainees and their level of knowledge;

- developing partnerships with various social services and local community;

- concern for professional development and improvement;

- willingness to try new instructional strategies;

- application of ethical norms and legal responsibilities specific to teaching profession.

We develop the following integrative framework for the components of pedagogical competence (Sulaiman, 2020; Apostolache, 2022):

a) Design and planning of the didactic process: developing of annual planning in a coherent and unitary manner in terms of educational knowledge, didactic projects, planning of learning activities in laboratories, workshops and nonformal activities, etc.;

b) Counseling and guiding the pupils: supporting them in school/academic issues, but also in personal problems, suggestions for school/professional orientation, resolving conflictual contexts, guidance to other professionals in pedagogical field, etc.;

c) Implementation of the instructional process: designing learning tasks, organizing them into groups,

formulating homework assignments, laboratory applications, etc.;

d) Assessment of learners' results (Herppich et al, 2018): development of evaluation tools, scheduling of assessment, supervision of learners during solving of assessment tasks, recording of grades and their communication accompanied by a concrete, particular and specific feedback, etc.;

e) Trainees group management: ensuring and maintaining school discipline, managing time and material resources, developing interactions for formative purposes at work groups level etc.;

f) Communication and interaction: vertical (with superiors or pupils) or horizontal communication (with colleagues), effective management of paraverbal and nonverbal elements of communication to emphasize the correct and complete understanding of informational messages transmitted; collaboration with all individuals involved in training process to solve various impediments/aspects of pupils' school path etc.;

g) Professional development: availability to participate in training programs (didactic, methodical, scientific field), at conferences and workshops, draw up scientific articles that help the trainer keep up with the progress made in these areas.

Embedding all the previously presented models can become an opportunity for a reflexive perspective in terms of assumption by each trainer for practical application of all pedagogical competence aspects.

Our present approach aims at emphasizing the need to analyze the pedagogical competence dimensions so that trainers will be aware of their pedagogic actions impact when working with students in didactic processes.

At the same time, it is important for developers of teacher training programs to include learning activities that offer opportunities for improving and refining the pedagogic competences dimensions. For this study, we noticed that pedagogic competence is a subject of analysis in educational sciences fields, but it would be useful to become a point of interest for the initiators of teacher training programs in institutions that offer these opportunities.

Teachers training programs need to adapt to challenges of social and cultural context. We can ask how many of the future teachers know whether teacher training programs help in building such capacities or

how willing they are to improve them. Does the training of pedagogic competence remain only an educational imperative often mentioned in decision-makers speeches or is it really a constant concern in development of teacher training programs? Consequently, it is essential to understand the extent to which providers of teacher training programs adopt the real requirements and needs of teachers for strengthening pedagogical competence.

It is believed that if teachers feel understood, then they can openly accept the current challenges of didactic innovation and effectively integrate the acquired skills in professional training courses into their daily teaching activities. Regarding this issue, a number of studies (Kunter et al, 2013; Boyd et al, 2009) indicate that the way a teacher carries out his work is determined by his whole personality, not only by the acquisitions developed during the stage of initial academic training. Competent teachers are considered to be those who have acquired knowledge and skills important for their professional training. Some possible differences between certain levels of competence can be justified by the existence of quality gaps, duration and intensity of their professional training.

At institutional level where teachers training programs are carried out it is required to stipulate clear objectives related to construction of pedagogical competence, such as:

- identification of development level for pedagogical competence at teacher students upon entering the training system;
- analysis of approaches regarding the training of future teachers in the pedagogical skills field;
- creating integrative methods of those skills in general and mandatory framework of teacher training programs;
- transfer of good practices from other educational institutions.

3. Research methodology

Our research aimed to identify teachers' and students' perception about the main dimensions of pedagogic competence.

This qualitative study was carried out through an exploratory approach, using the focus group method and applying the categorical thematic content analysis. Therefore, we gathered information about the concept of pedagogical competence because the main purpose of the study was to outline a framework of pedagogical

competence, as it is viewed by teachers and students. Thus, the interview guide had the main themes defined on the basis of the synthetic structure of the pedagogical competence proposed by us in first part of this approach.

Therefore, for each theme we develop some categories that describe the opinion about what pedagogical competence means.

Objective:

Identifying perception of teachers and students about pedagogical competence dimensions.

Participants

In this exploratory approach participants were divided in two groups. They were recruited in several high schools in Iasi and were formed into two different groups, as follows:

- a) first group was composed of 19 high school students;
- b) the second group was structured of 17 teachers who teach at high schools.

Data Collection and Analysis

Using a focus group in this research came from a need for quick information gathering that will help in the structuring of teacher's competence framework. The following stages were completed:

- a) Creating an organizing focus-groups.
- b) Transcript of discussions.
- c) Applying the thematic categorical analysis.

Research Tool

Present discussions were preceded by integrating the participants within the group (each of them was asked to introduce themselves and indicate if they are a teacher or a student). The participants were given a time of 10 minutes for getting to know better the moderator and other group members.

Next, the moderator presented the discussion topic, the reason why the participants were brought together in the focus group, the research topic, the scientific relevance of discussion and usefulness of the obtained results. Participants received assurances regarding the anonymity and confidentiality of information and opinions they expressed.

Group discussions lasted between 40-50 minutes. The interview guide was designed in such a way that

both categories of participants would be able to access questions proposed in order to achieve our purpose, but also to get a deeper understanding of pedagogical competence concept.

It should be mentioned that some of the questions were designed with certain supporting elements, in order to come with additional explanations that were offered in situations where the participants needed elucidation.

4. Results

We built a mixed categorical thematic content analysis (one in which the categories and some themes are predetermined, but identifies other themes along the way), following the recording of answers to interview guide questions applied in the focus group conducted together with participants.

Some of the main themes were fields of pedagogical competence proposed in integrative framework from theoretical background and specifications resulted from the answers given by participants.

It is important to specify that, besides the seven themes from pedagogical competences framework in theoretical background, it turned out that participants indicate a lot of personality traits for teacher. They considered this personality aspects can be very important in strengthening the pedagogical competence.

Therefore, we developed one more theme, meaning we have eight dimensions for pedagogical competence, as follows:

Theme 1: Teacher personality traits

- Joy of being a teacher;
- Patience;
- Inner balance and contentment;
- Tolerance (x2);
- Calm (x3);
- Well-intentioned;
- Flexibility;
- Adaptability;
- Empathy;
- Sense of humor;
- Teaching talent (x2);
- Ability to be a leader.

Theme 2: Design and planning of didactic process competences

- Anticipation of unexpected situations in classroom;
- Planning learning activities according to students' level and age (x2);
- Designing home lesson projects;
- Knowing specific characteristics for each individual pupil (social, emotional, psychological factors);
- Imagination and creativity when conceiving didactic scenario;
- Differentiated learning activities by classes, group value, students (x2);
- Designing applied learning tasks, in which theory and practice are combined.

Theme 3: Counseling and guiding competences

- Suggesting active social contact with students;
- Imposing in front of the students;
- Friendly attitude;
- Fairness in mediating conflicts;
- Being a partner to trainees in learning activities;
- Taking care of children without parents;
- Requesting support of school psychologist and speech therapist in problems related to
- Development of students' personality;
- Collaborate with pupils' families (get to know the students' parents) (x2).

Theme 4: Implementation of the instructional process competences

- Using book collections, additional materials, worksheets (x2);
- Capturing students' attention through teaching methods (x2);
- Adequacy and opportunity when choosing didactic methods;
- Developing applied learning activities (x2);
- Providing exercises (graded from simple to complex) on lesson subject;
- Using examples in order to capture students' attention (x3);
- Offering homework that deepens class units;
- Prescribing useful homework;
- Encouraging team work;

- Creating a relaxed atmosphere during classes.

Theme 5: Learner's assessment competences

- Ensuring that no student cheats on tests;
- Objective assessment and feedback;
- Develop specific and diverse test items;
- Assessment according to student's progress;
- Explaining grades to pupils in order to offer concrete feedback.

Theme 6: Trainees group management competences

- Implementation of classroom rules in a balanced manner;
- Applying certain management strategies for the trainees group;
- Effective management of students' time and effort;
- Offering work tasks (responsibilities) and capturing attention of unruly students (x3);
- Providing advice, help and encouragement in class assignments;
- Checking students if they are working effectively in resolving learning tasks;
- Maintaining discipline in the classroom by providing students with learning activities;
- Focusing on ways to improve the behaviors of undisciplined students;
- Facile adaptation to unpredictable situations when talking about pupils' behavior problem (x3).

Theme 7: Communication and interaction competences

- Applying active communication strategies and listening when students complaining;
- Open and dynamic attitude in communicating with pupils;
- Informal discussion with students, not only problems related to the lesson;
- Gaining respect by having a good/balanced relationship with pupils (x2);
- Easily captures the audience's attention;
- Organizing work meetings and didactic activities in which parents, representatives of the local community or specialists in various fields of activity can participate;
- Suggesting extracurricular activities
- Open to dialogue with students.

Theme 8: Professional development competences

- Keep up with the progress in both didactic and scientific field;
- Integrating in international project and mobilities;
- Participation at scientific workshops;
- Organizing workshops, conferences;
- Participation in training courses (x2);
- Book publishing or developing scientific articles;
- Research activities;
- Discovering and learning about innovative instructional methods;
- Attending conferences organized by schools or high schools;
- Giving speeches in the public space.

5. Discussions

Categorical thematic content analysis highlighted the appearance of pedagogical competence elements that are additional to those included in the theoretical model. On the other hand, we identify some previously proposed elements that were not mentioned by the participants.

Besides the seven themes from pedagogic competences framework in theoretical background, it turned out that participants indicate a lot of personality traits for teacher as being essential in improving our interpretation on pedagogical competence. They considered that personality aspects can be very important in strengthening the pedagogical competence and in capturing the whole picture of a good teacher. Therefore, we developed one more theme - *teacher personality traits*.

In order to have a complete framework for dimensions that make up pedagogical competence, we kept the elements newly mentioned by the participants and those that did not have a high frequency but we considered them relevant for defining a competent teacher, such as:

- Organizing extracurricular activities;
- Offering applied learning tasks, in which theory and practice are combined;
- Adapting to any unforeseen behavior or action that may occur during class;

- Requesting the support of school psychologist and speech therapist in problems related to development of students' personality;

- Organizing work meetings and didactic activities in which parents, representatives of the local community or specialists in various fields of activity can participate.

On the other hand, our study highlighted that trainers should demonstrate tasks as: designing tangible educational goals, encouraging and motivating participants to actively engage in learning process, using of a varied range of didactic methods and procedures, applying active educational strategies, structuring learning materials necessary to make learning more efficient, making the educational knowledge accessible in order to encourage understanding for every pupil, implementing certain management strategies for the trainees group, monitoring individual progress, establishing evaluation criteria according to educational objectives, providing relevant feedback on the grades obtained by students.

6. Conclusions

A set of pedagogical competencies has been identified in this study that includes knowledge and didactic skills, but also interpersonal abilities that contribute to teachers' professional success.

According to results obtained in our exploratory study, a program for development of teachers' pedagogical competencies (Klein et al, 2004) can be structured in three categories:

1. Activities on pedagogical competence category focused on the pupils' specific interests: the program proposes some actions for development of following dimensions:

- Building a stimulating and safe learning environment where learners are guided towards reflective thinking, self-education, self-evaluation and lifelong learning;

- Taking into account pupils knowledge background for didactic process;

- Increasing active communication within the group of learners;

- Compilation of educational resources that encourage active learning;

- Effective selection of formative and summative assessments forms to mirror objectively the quality of school results;

- Providing periodic, descriptive, encouraging and constructive feedback;

- Advising and guiding the trainees.

2. Activities on pedagogical competences that refer to teacher:

- Assessment of trainer pedagogical skills in order to obtain permanent development;

- Developing a model behavior for pupils;

- Involvement in various innovative research educational programs.

3. Activities on competences related to teacher's relationship with other colleagues revolve around the following dimensions:

- Providing and requesting feedback from colleagues;

- Sharing good practices with colleagues.

Professional development of teachers is based on (Kong et al, 2020): the existence of time slots dedicated to learning, rather than participating in different workshops; active and interactive involvement in training programs, eliminating the passive reception of information that may be unproductive; integration of practice activities within the school community in order to analyze various professional aspects, to offer support and help to colleagues, to reflect on the didactic approach they adopt; mastering the pedagogical principles regarding the accessibility of scientific knowledge that they present, regarding the stimulation of trainees learning motivation.

Concluding, as an extension to the results of our study, we can say that there are some actions to make the development of pedagogical competence more efficient, such as:

- outlining some training courses taking into account the opportunities offered by educational institution, but also development needs of the teachers;

- adapting the knowledge of teachers' professional development courses to current level of their pedagogical skills;

- an integrating framework of skills and abilities built during the pedagogical competence development

courses that include both the needs of teachers, but also the expectations of parents and pupils/students;

- the same curriculum knowledge for all institutions that organize teacher training programs.

Authors note:

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