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THE COMPETENCIES OF TEACHERS, IN THEIR UNDERGRADUATE TRAINING: A STUDY OF THE PROFESSIONAL PROFILE FOR PEDAGOGICAL ACTION IN BASIC EDUCATION, IN THE CITY OF SOACHA-COLOMBIA

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Abstract. This article collects data from research carried out in the city of Soacha, Colombia, on the skills acquired by teachers in their undergraduate training and who work at the basic education level. It aims to indicate in a mixed type analysis, the strengths and opportunities, as well as the weaknesses and threats, in reference to: the competences acquired, in a sample group of 50 teachers through instruments such as the survey and the interview, competences that are necessary in the professional profile proposed by national educational policies. The data, will let us see, a diagnosis of the percentage of competitiveness compared to the requirements of the Colombian state, which aims to achieve educational excellence by 2025, as the best country in education processes in Latin America. The study shows us the real profile of the teacher, at the undergraduate educational level and their strengths and weaknesses when it comes to professional internships, as well as the approach to the profiles requested by the state. In the same way, it will give guidelines so that the institutions that apply the methodology, can from the implementation and analysis of the proposal, project improvement plans in the training of the human resource that participates in the development of the Institutional Educational Project with which it is intended achieving higher educational quality, as well as proposing training and improvement articulations with the universities from which the teachers have graduated and that are entering the educational environment of the city of Soacha.

Keywords: competences, undergraduate, training, educational quality, teaching profile.

LAS COMPETENCIAS DE DOCENTES, EN SU FORMACIÓN DE PREGRADO: UN ESTUDIO DEL PERFIL PROFESIONAL PARA LA ACCIÓN PEDAGÓGICA EN EDUCACIÓN BÁSICA, EN LA CIUDAD DE SOACHA-COLOMBIA

Resumen. Este artículo recoge los datos de la investigación hecha en la ciudad de Soacha, Colombia, sobre las competencias que adquirieron los docentes en su formación de pregrado y que laboran en el nivel de educación básica. Pretende indicar en un análisis de tipo mixto, las fortalezas y oportunidades, así como las debilidades y amenazas, en referencia a: las competencias adquiridas, en un grupo muestra de 50 docentes a través de instrumentos como la encuesta y la entrevista, competencias que son necesarias en el perfil profesional que propone las políticas educativas nacionales. Los datos, nos dejará ver, un diagnóstico sobre el porcentaje de competitividad frente a los requerimientos del estado colombiano, el cual pretende para el año 2025 alcanzar una excelencia educativa, como mejor país en los procesos de educación en Latinoamérica. El estudio nos muestra el perfil real del docente, en el nivel educativo de pregrado y sus fortalezas y falencias a la hora de las prácticas como profesional, así como el acercamiento a los perfiles que solicita el estado. De igual modo, dará pautas para que las instituciones que apliquen la metodología, puedan desde la implementación y el análisis de la propuesta, proyectar planes de mejora en la formación del recurso humano que participa en el desarrollo del Proyecto Educativo Institucional con el cual se pretende alcanzar mayor calidad educativa, como también el proponer articulaciones formativas y de mejora, con las universidades de las cuales han egresado los docentes y que incursionan en el ambiente educativo de la ciudad de Soacha.

Palabras clave: competencias, pregrado, formación, calidad educativa, perfil docente.

Introduction

This article gathers the research conducted in the city of Soacha-Colombia to a group of teachers who work at the primary and secondary levels of the institutions administered by the Diocese of the same city, with the aim of visualizing by way of diagnosis, the competencies acquired in the undergraduate training, and to be able to specify the degree of competitiveness with regard to the profile that is requested according to the educational policies given by the state and the Colombian Ministry of National Education; since this aims to make the country the best educated in Latin America for the year 2025, i.e., to acquire a very high degree of quality in the educational processes and as a fundamental and articulating axis of education (Acuña and Pons, 2018). In the document we will find the description of the main competencies that make up the teacher profile, so that their educational work is relevant and of very high quality and, thus, achieve the objectives proposed for the year 2025.

The teaching profile for the XXI century, in accordance with global proposals and those developed in the country, offers a set of competencies that are initially presented to give context to the research carried out. From this point of view, reference is made to a conceptual theoretical framework, of the competencies proposed by some experts in the field and that guide the teaching-learning process, which is applied in Colombia. All the above, according to the Ministry of National Education and with it also, the set of parameters that surround undergraduate teacher training, the improvement plans around the shortcomings that have been had, and the analysis of the objectives of an education at the teacher level, which contribute to a relevant formative quality, both for them and for the students in their charge and, in this way, contribute to strengthen their training and propose tools for a curriculum, which help in the quality education policies of these educational communities (Acuña and Pons, 2018).

Approach to teaching competencies from the science of education.

In the academic field, there are proposals for a teaching ideal, for a profile of the education professional that responds to the challenges that the world needs, and the academy, in these fields, always investigates what is the best and most adequate model for teachers in their professional work.

For several decades, researchers in the field have been considering the role of the teacher and his or her competencies in the world of the 21st century, as well as the need for a change in attitude and, therefore, a change in the traditional way of educating teachers.

We find authors and thinkers such as Beltrán (2003), with his studies on education; educational psychology; learning processes and strategies; strategies for conflict resolution; concept, development, and current trends in the psychology of instruction; Gardner (2005; 2017), in his research on multiple intelligences; Ricoeur (2003), in his proposals on comprehension and narration; Perkings (1992), in his book: The Intelligent School; Vygotsky (1978), and his sociocultural theory of cognitive development; Bueno (1998), and his educational research on the brain, teacher approval, visual arts, music, and physical education and brain stimulation; Coll (1995), and his psychology of education; Doyle (1986), from his ecological model in education; Mayer (1992), in his educational design for constructivist learning and the approach to multimedia learning; Ausbel (1968), in his theory of meaningful learning; Baltes (1998), in his life cycle development approach; Beltrán (2002), in his learning processes, strategies, and techniques; Galindo (2001), with his active methodologies; Kohlberg (2015), in his moral development theory; Paulov (1972), in his classical conditioning proposal; Piajet (1970), in his constructivist approach learning theory; Skiner (1965), in his operant conditioning theory; González and Escudero (1987), in their research on educational innovation; Tejada (2008), in his proposal of teaching competencies; Alonso and Gallego (2000), in their research on learning styles; Diaz (2000), in teaching strategies for meaningful learning; Porter (2008), in his proposals on the forces that move competencies.

A teacher, in his initial and continuous training, acquires competencies, i.e., a set of social, affective behaviors, as well as cognitive, psychological, sensory, and motor skills, which lead him to correctly perform his activity or profession (Calix, 2013). According to Chomsky (1985), it is from the theories of language that a concept of competence is established as the capacity and disposition for a performance and interpretation. Ruiz, M. (2011) refers with respect to competencies; five attributes which are: (1) the one referred to performance, or manifestation of competence since it is invisible in itself; (2) the one referred to the contextual in a specific way, points out that human actions are expressed in particular and specific contexts; (3) the one referred to integration, which is the ability to face novel situations and to know what, how, and when to act with the acquired knowledge; (4) that referring to leveling, which allows the learner to move from initial levels to higher levels of experience; (5) that referring to the norm, which refers to the behavioral guidelines or criteria for action that indicate how an individual should behave in a given situation.

Does the profile currently presented by universities allow for quality education? In order to answer this question (Zabala, 2007), he presents a classification as follows:

- The teacher is the animator of learning situations.
- Prepares and selects the disciplinary contents.

- Masters communication skills, i.e., providing understandable and well-organized information and explanations.
- Knows how to handle new technologies.
- Designs the methodology and organize the activities.
- Relates familiarly with the students.
- Performs its function as a guardian.
- Develops its ability to evaluate.
- Applies his knowledge to reflect and research on the teaching he teaches.
- Identifies himself with the institution and knows how to work in a team.

Perrenoud (2004) says that the teacher will develop the competencies necessary for life and points out the following classification:

- The teacher organizes and encourages learning situations.
- Manages learning progression.
- Develops and evolves diversity care devices.
- Involves students in their learning.
- Works in teams and makes teams work together.
- Participates in the management of the school.
- Informs and involves parents in the educational process.
- Uses ICTs.
- Confronts the duties and ethical dilemmas of the profession.
- Organizes its own continuing education.

Sarmiento Díaz (2000) presents three approaches: (1) traditional pedagogy and its implications; (2) activist pedagogy; and (3) conceptual pedagogy and its implications. In this evolution of pedagogy, the teacher acquires the competencies of cooperating with students to promote their intellectual, psychomotor, and value skills, that is, seeking the student's development; helping students to form concepts and intellectual operations with which they can understand and interpret the world; being an expert in cognitive and value-attitudinal development; mastering the concepts and basic laws of the science or discipline they teach, controlling the wrong or partial concepts issued by the students, and strengthening the correct concepts.

Competencies from the science of education for a teaching profile in our context.

Competencies that help you learn to teach

According to Sarmiento (2000), the teacher is trained to know and master the components of the educational process, such as, Who learns, Who teaches, (People), What is learning for, What is teaching for, (Sense of Education), Why is learning done, Why is teaching done, (Motivations), How is learning done, How is teaching done, (Processes), What is learned, What is taught, (Concepts, contents, skills, attitudes, values, mental operations, management of multiple intelligences, etc.), Where is learning done, Where is teaching done, (Spatial, physical and digital-virtual contexts), When do we learn, When do we teach, (Spatial, physical, and digital-virtual contexts), When is it learned, When is it taught, (Temporal contexts, synchronous, and diachronic virtual contexts), What is it learned with, What is it taught with, (Resources).

Other competencies have to do with the processes it will accompany, i.e., cognitive processes, physiological processes, affective processes, methodological processes, technological processes (Sarmiento, 2000).

The teacher will possess the skills to determine the educational factors that influence learning, both those centered on the educational context, those centered on the context of the educator and those centered on the teaching context. He/she must have a clear knowledge of the educational policies of his/her region, as well as the curriculum of the institution in which he/she works. The teacher acquires competencies in terms of innovation, its impact and management. Also, in terms of interpersonal relations, communication skills, or interpersonal relations, attitudes towards oneself, appreciation, self-esteem, and confidence; values important to the educator, attitudes towards students, expectations towards students, problem management and communication established with students, management of authority, fostering motivation, and adaptation to different individualities. Competencies, which will help the factors centered on teaching, all in terms of planning, organization, proposals, methodologies, activities, contents, evaluations, practices, transfers, and resources.

The teacher must know the development of the learner (factors of the learner that influence learning), the prenatal period, the preschool period (sensory-motor and pre-operational), the school period, the period of adolescence, young adulthood, middle age, and the period of old age. Also, to possess competencies for cognitive factors, to know the functioning of the cerebral hemispheres, vertical and lateral thinking, intelligence, perception, attention, retention, thinking, and previous knowledge; for affective factors, i.e., self-concept and self-esteem, motivation, emotions, and a last level in terms of behavioral factors (Sarmiento, 2000).

Competencies that help you teach to learn

The educational process undergoes a series of changes, and some consider learning as the central axis of this process. The teacher will have the competencies in terms of the knowledge of the different learning theories, such as those focused on the interior of the individual, those focused on the exterior, conditioning theories (classical, connectionism, behaviorism, contiguity), theories related to operant conditioning. There are also cognitive learning theories (gestalt, constructivist) and bridge theories between associative and cognitive theories, such as propositional behaviorism, social learning theories, self-management, cognitive behavioral modification, cognitive information processing theory (Sarmiento, 2000).

At this level of teaching to learn, the teacher will also possess competencies to facilitate learning, to know the types of learning, the cognitive structure of the learner, metacognition, learning strategies related to memory, learning strategies related to thinking, learning techniques (construction of concept maps, reciprocal teaching, the PQ4R method). Similarly, the competencies that have to do with skills that improve the quality of life and human development, i.e., skills that allow people to manage their own lives and live with other beings and their environment, competencies for multicultural education, cooperative learning, education in values, and eco-psychology (Sarmiento, 2000).

The Role of the Teacher and the Interpersonal Nature of Learning

Following Cooper (1999), we can indicate some general areas in which the teacher supports the student in the construction of knowledge. These areas are the following:

- Sufficiently deep and relevant theoretical knowledge about learning, development, and human behavior.
- Deployment of values and attitudes that foster learning and genuine human relationships.

- Mastery of the contents or subjects taught.
- Control of teaching strategies that facilitate student learning and make it motivating.
- Practical personal knowledge about teaching.

Gil, Carrascosa, Furió, and Martínez-Torregrosa (1991) reflect on teacher training and its activity, with the objective of generating didactic knowledge or integrating knowledge and the result of the following didactic approaches:

- Know the subject matter to be taught.
- Know and question spontaneous teaching thinking.
- Acquire knowledge about science learning.
- Make an informed critique of the usual teaching.
- Know how to prepare activities.
- Know how to direct the activity of the students.
- Know how to evaluate.
- Utilize research and innovation in the field.

Teacher training requires that teachers become accustomed to handling a series of learning, instructional, motivational, and group management strategies, among others, in such a way that they can induce through exercises, demonstrations, clues for thinking, feedback, and others; and, in each case, consider the following points:

- The characteristics, deficiencies, and previous knowledge of the students.
- The learning task to be performed.
- The contents and study materials.
- The intentions or objectives pursued.
- Existing infrastructure and facilities.
- The meaning of the educational activity and its real value in the formation of the student.

In Rogoff's (1984) thinking, there are some general principles that characterize the teaching-learning situations, and that the teacher in his training acquires for the correct intervention in this same process:

- Provide the student with a bridge between the information he/she has (his/her previous knowledge) and the new knowledge.
- Provide the student with an overall structure for the development of the activity or the completion of the task.
- Progressively transfer control and responsibility from the teacher to the student.
- Promote a demonstration of active intervention on the part of the teacher and the student.
- Make explicitly and implicitly appear the usual forms of interrelation between teachers/adults and students/minors, which are not symmetrical, given the role of the teacher as tutor of the process.

Competencies versus multiple intelligences

It has come to be understood that human beings possess multiple intelligences, which help them to approach the object of knowledge. Gardner (2005) shows a taxonomy of them. The teacher must study and know them, in order to diagnose them in the students under his charge and be able

to enhance them during the teaching-learning process. These intelligences indicate the way in which the individual approaches his reality and understands it and, therefore, learns from his environment through the development of them. The student, of whichever of the degrees for elementary and secondary education, will know them. These intelligences are classified in a number of eight.

Information Management Competencies

Each teacher has an area on which he/she works on his/her training. In Colombia, for training and education at the elementary and junior high school level, the teacher must handle one of the nine compulsory and fundamental areas, according to the General Education Law (Law 115): (1) natural sciences and environmental education; (2) social sciences, history, geography, political constitution, and democracy; (3) artistic education; (4) ethics and human values education; (5) physical education, recreation and sports; (6) religious education; (7) humanities, Spanish language, and foreign languages; (8) mathematics; (9) technology and computer science (Ministry of National Education [MIN], 1994, art. 23). The teacher must have information management skills and master them in order to help the student to acquire them and to help him/her in the management of the information received.

According to the Ministry of National Education, these competencies are the basic ones: scientific competencies, citizenship competencies, communicative competencies, and mathematical competencies. The scientific (natural and social) competencies favor the development of scientific thinking and allow the formation of people who are responsible for their actions, critical and reflective, based on holistic thinking, in interaction with a complex and changing context. The citizenship one's form people who can use their cognitive, emotional, and communicative skills to solve individual and social problems, in a flexible way, in the proposal of creative and innovative alternatives, in an increasingly intelligent, understanding, fair, and empathetic manner. The communicative ones, form people capable of communicating assertively (both verbally and non-verbally) as interlocutors who interpret, understand, and argue meanings, that is, to interpret, argue, and propose, taking into account the particularities of each communicative situation. Mathematics favors the ability to formulate, solve, and model reality phenomena. Communicate, reason, compare, and exercise procedures in the acquisition of knowledge, skills, attitudes, and understanding of mathematical thinking, which facilitates a flexible, effective, and meaningful performance.

Following Marzano (2005), it is necessary to take into account the dimensions of learning, which from this author's taxonomy would be: (1) positive attitudes and perceptions towards learning; (2) reasoning for the acquisition and integration of knowledge; (3), reasoning for the deepening and refinement of knowledge (comparing, classifying, inducing, deducing, analyzing errors, establishing and elaborating foundations, analyzing perspectives, creating and applying abstractions); (4) reasoning for the meaningful use of knowledge (decision making, research, experimental inquiry, problem solving, invention); (5) productive habits of mind.

Marzano and Kendall (2007 and 2008) propose a taxonomy of educational objectives. They present the domains of knowledge and systems of thought. In relation to the domains of thought, there are three levels: the domain of knowledge called information, the domain of knowledge called mental procedures, and the domain of knowledge called psychomotor procedures. In relation to

systems of thought, we have six levels: (1) Retrieval; (2) Comprehension; (3) Analysis; (4) Knowledge location; (5) Metacognition; (6) Internal system.

*Competencies in relation to the evaluation or follow-up of the teaching-learning process***.**

Evaluation is one of the most important actions in training and in the educational field. Today we are more aware than ever of its necessity since it indicates the what, how, why, and when of teaching and leads to making decisions to improve this process. These factors introduce a culture of evaluation. Whoever is being trained as a teacher should be aware of this environment and have the skills to carry out a correct and concrete evaluation of processes, student results, even of the curriculum itself, teaching practice, centers, and the educational system (Hussen, 1990).

The teacher must distinguish between evaluation, qualification, and measurement. They must also have a clear knowledge of the areas of evaluation, such as attitudes, skills, educational programs, didactic curricular materials, teaching practice, schools, the educational system as a whole, and evaluation itself; they must manage in their work the types of evaluation: formative, summative, global, partial, internal (self-evaluation, hetero-evaluation, co-evaluation), external, initial, procedural, final, self-reference, hetero-reference (criterial and normative).

*Competence in the use of new technologies applied to education***.**

Teachers must be fully aware of the principles of ICT competencies, which are essential characteristics to fulfill all the processes of teacher professional development, in order to be considered aligned with the vision of our country to promote educational innovation (MIN, 2013, p. 30). These principles are:

- Relevant.
- Practical.
- Located.
- Collaborative.
- Inspiring.

Regarding competencies (MIN, 2013, pp. 36-44), we can list the following:

- Technological competence.
- Pedagogical competence.
- Communicative competence.
- Management competence.
- Investigative competence.

These competencies have some degrees (MIN, 2013, pp. 34-35), moments, or levels, as follows:

- Explorative.
- Level of integration.
- Moment of innovation.

We find the digital teaching competences, which according to the definition of the National Institute of Educational Technologies and Teacher Training of Spain, a digital competence is:

> Digital competence involves the critical and confident use of Information Society technologies for work, leisure, and communication. Relying on basic ICT skills: use of computers to retrieve, evaluate, store, produce, present, and exchange information, and

> to communicate and participate in collaborative networks via the Internet (European Parliament and the Council, 2017, p. 12).

Digital competencies that every teacher should have:

- Area of information competence and information literacy (INTEFP, 2017, pp. 15-35).
- Digital content creation competency area: (INTEFP, 2017, pp. 37-45).
- Safety competency area: (INTEFP, 2017, pp. 47-55).
- Problem-solving competency area: (INTEFP, 2017, pp. 57-65).

Teaching competencies, in the context of research.

The academic and legal environment was structured, both of the state and of the municipality from where the research was proposed since in Colombia this municipality is an autonomous territory, in terms of policies and application of the general law of education and proposes its own plans and regulations in search of quality education, without omitting the guidelines of the national Ministry of Education to which every Colombian territorial entity is subject.

Country Context

What does it mean for Colombia to be the most educated country in Latin America in 2025? This is the question that the Ministry of Education and the Country's Policies have posed. This will happen if the base, which are the teachers, are well trained. The Ministry of National Education through the Colombian System of Teacher Training and Professional Development (MIN, 2018, pp. 107-108) presents a structure and organization for this training. A description is made of five objectives with their components that correspond to those formulated in the General Education Law.

The Ministry of National Education raises policies in this regard and plans a three-stage process: before, during, and after the degree. The instruments and documents presented by the Ministry show a path for further research in the different proposals, authors such as Baracaldo (2007) in his research on pedagogical knowledge; Rengifo (2014); Saavedra and Forero (2019) in 10 steps to be the most educated Colombia in 2025; Henao and Zapata (2013) in teacher training for basic education in Colombia; Aldana, Chaparro, García et al. (1996) in Colombia al filo de la oportunidad; and many more, along with some documents from the national education commission and the Ministry of Education, such as: Ten-year education plan, 2006-2016; Reflection on education in Colombia 2010-2018; Agreement for higher education 2034; public policy proposal for excellence in higher education in Colombia in the scenario of peace (2014); Rural higher education plan (2018); Quality benchmarks; all this documentation give us approaches and perspectives for a research in the formative field of the teacher of the XXI century.

In 2010, based on the guidelines established for undergraduate graduation tests, the six competencies that were formulated were reduced to three as follows (MIN, 2004, p. 8):

- Teaching.
- Training.
- Evaluate.

Particular Provincial Context

The Secretary of Education of Cundinamarca states that in 2010 a total of 6,456 teachers and teaching managers were trained in different programs. The teacher training goal was met by

244%, with respect to the number of teachers trained, which was 9,780 in relation to the Development Plan, which was 4,000 (SEC, 2010, p. 14).

It also proposes some strategic areas (SEC, 2010, pp. 16-22) of teacher training, which are listed below:

- Curriculum design and development.
- Training in the culture of evaluation.
- Flexible models.
- Incorporation of information and communication media and technologies.
- Training for the promotion of research and innovation.
- Management improvement.
- Articulation between education and the productive sector.
- Bilingualism for competitiveness.
- Training for the development of communication skills.
- Training for a sustainable environment.
- Education based on respect for diversity.

Educational context of the Campus

The Institutional educational project aims to educate and train for science, work, and coexistence from a pedagogical model for autonomous learning, developing multiple intelligences in an environment of management and application of new technologies for the solution of problems in the social and work environment of the student.

In the process of selecting teachers' profiles for the development of this educational project, the manifestation of training in the competencies necessary for the development of the educational proposals was investigated. The new teacher is not only an instrument in the teaching-learning process but also a valuable resource, who must be helped to fulfill his function and develop his educational role, and, therefore, it is necessary to detect his competitive level.

What is the educational environment in which the educational institutions of the Diocese of Soacha find themselves and in which the teachers develop after having received their undergraduate training? Let us look at this environment of the educational legal framework of our country.

Basic education (MIN, 1994, art. 19-26), which is immediately circumscribed from preschool and early childhood education (MIN, 1994, art. 15-18), with five years of primary and four years of secondary education, and middle school education (MIN, 1994, art. 27-35), which is two years. In basic education, according to the 1994 education law, there are nine fundamental areas, as previously stated (MIN, 1994, art. 23).

In Colombia, the general law of education establishes the goals of education. Teachers do not know how to articulate them from their knowledge and skills; in their preparation there is still an emphasis on the conceptual or thematic aspects, with respect to the area they handle. The 13 purposes (MIN, 1994, art. 5) set forth in the general law (in accordance with article 67 of the National Constitution of Colombia). This article of the education law describes thirteen purposes of education.

It also proposes general and specific objectives for each educational level, both in primary and basic education (MIN, 1994, art. 19-22).

The General Objectives of Basic Education are described in the aforementioned articles of the Education Law in a total of seven objectives**.** Likewise, there are specific objectives for basic education in the primary cycle and specific objectives for basic education in the secondary cycle**.**

National teacher profile

The Ministry of National Education has proposed sound policies. In its document on quality guidelines for bachelor's degrees in education (MIN, 2004, p. 5), it reports that various processes of reflection have been carried out in different contexts on initial and continuing teacher training programs in our country. Similarly, a broad review of national and international literature on the teacher's profile, qualities, and functions, as well as competencies and characteristics, which help to identify similarities and coherences with the competencies formulated (MIN, 2004, p. 6), was carried out:

- Know what is taught, how it is processed, and what it is taught for.
- Know how to teach discipline.
- Know how students learn and to establish the differences that affect learning.
- Know how to organize and develop learning environments.
- Know how to monitor and evaluate student progress.
- Know how to propose, develop, and evaluate educational projects.
- Know how to articulate their pedagogical practice to the contexts.
- Know how to work in a team.
- Be committed to the learning achievements of their students.
- Know how to use technological aids to enhance the learning process.
- Be committed to self-evaluation and continuous personal and institutional improvement.

Educational training proposals

The Colombian Association of Higher Education Institutions with Professional Technical and/or Technological Training (ACIET, 2016, pp. 64-66), in a commitment with the National Ministry of Education, refers that the National Education System is configured as a great opportunity for inclusion, equity, and recognition because it allows building a new history on the characteristics of Colombians, who will be trained to live in peace and achieve high levels of economic and social development. The document describes the ten fundamental reasons.

To ensure educational quality in the nation, the Ministry of National Education will also evaluate teaching performance (MIN, 2013, pp. 7-19) in the country and will, therefore, focus its evaluation on the competencies proposed in the exam that regulates the public service. The competencies to be evaluated are:

- Disciplinary.
- Pedagogical.
- Behavioral.

Recent research in the field on the subject of the research carried out.

Some research approaches have been made around the issue of the quality of education and the competencies that are needed both for teachers and to develop in the student body at the basic education levels. Among the research concerning teacher training, I could cite Villota (2016) and his scientific research article, "*research on the problems faced by the training of educators in undergraduate programs in Colombia: A State of the Art,"* where different researches in the country are collected. The research of Henao and Zapata (1994), in their article, "*Teacher training for basic*

education in Colombia," in a legal-political context from Law 115 or general law of Education that regulates the entire educational system and that will show a contrast from that time to date.

Jurado (2016) refers to the renewal of teacher training in Colombia, points out teacher training models. Velasco (2018) in his research, exposes a series of competencies that the teacher must acquire to propose and reach the success of the curriculum. At the level of students and what they should receive, we have Barrera, Maldonado, and Rodriguez (2012). In their research, it raises some educational policies for Colombia that allow reaching educational quality in the country.

Method

A statistical analysis was designed through the collection of data in two surveys and an interview, with the perspective of diagnosing teaching competencies at the undergraduate level. The hypothesis was posed: do Colombian teachers at the elementary and junior high school levels, who work in the educational institutions of the Diocese of Soacha, acquire in their undergraduate training the necessary competencies for the performance and accompaniment of the teaching-learning processes, according to the role proposed by the Ministry of National Education and the educational environment of the XXI century?

The participants are framed in the Colombian educational environment and the sample was taken from a group of 150 teachers who work in the schools administered by the Diocese of Soacha. The sample group is of 50 teachers, with the assumptions for the selection of five teachers from each of the nine basic grades, that is, 45 teachers, discriminated by grade, one from each fundamental area of the five required by the legal system: Spanish, Social Studies, Foreign Language, Mathematics, and Natural Sciences. In addition, there is one teacher for the areas of Arts, Recreation and Sports, Religious Education and Ethics, which are common to all grades, and two teachers of Technology and Computer Science, also common to all grades, for a grand total of fifty teachers. In this way, all the areas proposed in the national educational regulations and the entire educational universe required in primary and secondary basic education were covered.

The first survey has a competency approach to the teaching profile. It analyzed 13 groups (clusters) of competencies as follows: (1) competencies with respect to the aims of education; (2) competencies with reference to the general objectives of basic education in Colombia; (3) academic management competencies; (4) administrative management competencies; (5) community management competencies; (6) leadership competencies; (7) communication and interpersonal relations competencies; (8) teamwork competencies; (9) negotiation and mediation competencies; (10) social and institutional commitment competencies; (11) initiative competencies; (12) achievement orientation competencies; (13) technology use competencies. The answers were in the options: always; almost always; sometimes; almost never; never.

The second survey was based on a survey conducted by the Pontifical University of Mexico, and questions were adapted to apply them to the context that was needed. The response form had the same five options as the first survey, and also some questions were given in multiple responses. Both surveys were applied through google forms.

The interview was conducted virtually through the Skype platform. The data were grouped in a SWOT matrix that shows the strengths and opportunities, as well as the weaknesses and threats in relation to the competencies that were raised in the surveys.

The data analysis was carried out using the clustering method or technique with certain characteristics, i.e., the different individuals were placed in homogeneous groups, so that they are considered similar, all of them determined by having acquired the competencies being investigated in each case. SPSS and Excel were used as the base program for statistical analysis. The process was developed in four steps as follows: (1) Analysis of the research questions; (2) Cross tabulation and filtering of results; (3) analysis of numbers and percentages; (4) conclusions.

Results

In order to understand the data obtained, they will be presented in tables.

Table 1

Competencies in reference to the aims of education

Purposes	Always	Almost always	Sometimes	Almost never	Never
End 1.	48%	36%	10%	6%	---
End 2.	84%	10%	6%	---	---
End 3.	48%	40%	10%	2%	---
End 4.	66%	22%	8%	2%	2%
End 5.	44%	40%	14%	2%	---
End 6.	50%	30%	14%	6%	---
End 7.	58%	32%	10%	---	---
End 8.	56%	30%	10%	4%	---
End 9.	44%	40%	14%	2%	---
End 10.	62%	32%	6%	---	---
End 11.	44%	40%	12%	4%	---
End 12.	54%	38%	6%	2%	---
End 13.	52%	32%	16%	---	---

53.69% of the teachers are always competitive, and 33.38% are almost always competitive; 12.93% are not competitive enough.

Table 2

Competencies in reference to the general objectives of basic education

Target	Always	Almost always	Sometimes	Almost never	Never
Objective 1.	54%	26%	18%	---	2%
Objective 2.	72%	26%	---	---	2%
Objective 3.	46%	42%	10%	2%	---

Objective 4.	56%	36%	6%	2%	---
Objective 5.	34%	40%	26%	---	---
Objective 6.	68%	28%	4%	---	---

55% of teachers are at an always competitive level, and 33% are at an almost always competitive level; 12% are not competitive enough.

Table 3
Academic management skills

Competencies	**Always**	**Almost always**	**With weaknesses**
Content Mastery	55%	33%	12%
Organization and planning	55%	33%	12%
Pedagogical and Didactic	65.6%	28.6%	5.7%
Evaluation and learning	62.2%	33.4%	4.3%

Table 4
Administrative management skills

Competencies	**Always**	**Almost always**	**With weaknesses**
Use of resources	69%	26%	5%
Process monitoring	72.5%	23%	4.5%

Table 5
Community management skills

Competencies	**Always**	**Almost always**	**With weaknesses**
Institutional Communication	67.6%	25.6%	6.7%
Interaction-Community	61.6%	35.6%	2.7%

Table 6
Leadership Competencies

Competencies	**Always**	**Almost always**	**Sometimes**	**Almost never**	**Never**
Competency 1.	64%	26%	10%	---	---
Competency 2.	66%	28%	6%	---	---
Competency 3.	64%	30%	6%	---	---
Competency 4.	54%	36%	10%	---	---

62% of teachers are at an always competitive level, and 30% are at an almost always competitive level; 8% are not competitive enough.

Table 7
Communication and interpersonal skills

Competencies	Always	Almost always	Sometimes	Almost never	Never
Competency 1.	60%	30%	10%	---	---
Competency 2.	72%	26%	2%	---	---
Competency 3.	74%	24%	2%	---	---
Competency 4.	66%	30%	4%	---	---
Competency 5.	64%	32%	4%	---	---
Competency 6.	70%	28%	---	2%	---

67.6% of teachers are at an always competitive level, and 28.3% are at an almost always competitive level; 4.06% are not competitive enough.

Table 8
Teamwork skills

Competencies	Always	Almost always	Sometimes	Almost never	Never
Competency 1.	70%	28%	2%	---	---
Competency 2.	64%	34%	2%	---	---
Competency 3.	56%	44%	---	---	---
Competency 4.	62%	32%	6%	---	---
Competency 5.	76%	22%	2%	---	---

65.6% of teachers are at an always competitive level, and 32% are at an almost always competitive level; 2.4% are not competitive enough.

Table 9
Negotiation and mediation skills

Competencies	Always	Almost always	Sometimes	Almost never	Never
Competency 1.	64%	34%	2%	---	---
Competency 2.	54%	42%	4%	---	---
Competency 3.	56%	34%	10%	---	---
Competency 4.	82%	16%	2%	---	---
Competency 5.	72%	24%	4%	---	---

65.6% of teachers are at an always competitive level, and 30% are at an almost always competitive level; 4.4% are not competitive enough.

Table 10
Social and institutional commitment competencies

Competencies	Always	Almost always	Sometimes	Almost never	Never
Competency 1.	82%	16%	2%	---	---
Competency 2.	64%	32%	4%	---	---
Competency 3.	80%	18%	2%	---	---
Competency 4.	92%	6%	2%	---	---
Competency 5.	86%	12%	2%	---	---
Competency 6.	90%	8%	2%	---	---
Competency 7.	92%	8%	---	---	---

83.7% of teachers are always competitive, and 14.2% are almost always competitive; 2.01% are not competitive enough.

Table 11
Initiative Competencies

Competencies	Always	Almost always	Sometimes	Almost never	Never
Competency 1.	70%	28%	---	2%	---
Competency 2.	80%	20%	---	---	---
Competency 3.	82%	14%	2%	2%	---
Competency 4.	66%	32%	2%	---	---
Competency 5.	60%	36%	4%	---	---

71.6% of teachers are at an always competitive level, and 26% are at an almost always competitive level; 2.4% are not competitive enough.

Table 12
Achievement-oriented competencies

Competencies	Always	Almost always	Sometimes	Almost never	Never
Competency 1.	76%	22%	2%	---	---
Competency 2.	68%	32%	---	---	---
Competency 3.	72%	26%	---	2%	---
Competency 4.	78%	18%	4%	---	---
Competency 5.	80%	20%	---	---	---

74% of teachers are at an always competitive level, and 24.4% are at an almost always competitive level; 1.6% are not competitive enough.

Table 13
Competencies in the use of technologies

Competencies	Always	Almost always	Sometimes	Almost never	Never
Competency 1.	54%	38%	6%	2%	---
Competency 2.	44%	40%	12%	4%	---
Competency 3.	58%	38%	2%	2%	---

52% of teachers are at an always competitive level, and 38.66% are almost always competitive; 9.34% are not competitive enough.

Discussion and conclusions

As for the general objective, which is to estimate the levels of professional competencies developed by Colombian teachers at the basic education levels during their undergraduate training, we can say that the competencies required in the Colombian teacher profile for this level are achieved in approximately 75%, and that this level is still not sufficient to achieve the educational excellence policies for 2025, as a better educated country.

It was possible to verify that there is a good percentage in the acquisition of competencies pertinent to the Colombian teaching profile. The search strategies for tools for the leveling of teachers who lack the proper competencies is urgent and the action of immediate improvement proposals to fill these gaps. This action must be assumed for now by the educational institution where the graduate performs the practices of the teaching-learning process.

The statistical tables also show us a panorama of little sufficiency in the use of ICTs as a pedagogical tool; at this point the situation is worrying and is a priority for the current situation of education in the virtual environment. In teachers, there is a great void in the use of ICTs as a pedagogical tool, and this has limited teachers to be able to perform adequately.

From the specific objectives, we can see, at least in the sample group, how our teachers are doing with regard to the different blocks of professional competencies that we sought to identify.

When looking at the research as a whole, it is up to the institution to formulate the direction of continuing education plans, so that in the whole set of competencies there is a holistic training in the teacher who acts in the development of educational projects in the institutions where he/she provides service at the basic education level. It is the duty of the different training entities (universities and higher education centers) to work together in order to provide the elements that train teachers in the competencies relevant to their field of action.

Limitations

One of the great limitations, which was given for this specific research, is the pandemic environment that the whole humanity lives. Due to this situation and the change of paradigms in education, the teacher is forced to use the communication tools of the new technologies in a compulsory way, and with them the challenges acquire new variants.

Another limitation is the analysis of the different variants of the five alternatives by groups, both of male and female teachers as well as teachers working in different courses and subjects. A general analysis has been made without being able to discriminate these variants. This can be developed in a parallel investigation.

The heterogeneous set of ages and years of graduation or formative periods is also a limitation for two decades ago there was no talk of competencies, and it is difficult to analyze the elements that teachers who graduated at that time possess in analogy to competencies. Similarly, not being able to apply the research with a larger sample due to the same pandemic situation and to the fact that the permissions to access state institutions is costly in procedures for access to such information and by the same policies of the municipality that does not allow this kind of inquiries and collection of information.

There are also limitations in the instruments that were elaborated for the collection of information since for each group of competencies it would require the construction of more defined and specific items on the causes and effects. Therefore, the objective was to point out the group of general competencies that the teaching profile requires in the educational environment framed in the research.

Implications and proposals for continuity

The first thing we can determine as an implication of the research is that the elements obtained are only the beginning of a diagnosis that must be completed with the help of other elements such as surveys more focused on each group of competencies that make up the teaching profile of our country from the teacher training environments in universities and curricular content as well as from the environments of application or teaching performance in the different educational institutions where teachers provide their services.

It is necessary to constantly monitor the state of the competencies of teachers since it is necessary to be pertinent in the field of their application as well as in the projection of excellence and educational quality, and this requires that there be an awareness of help and joint work between the different universities and educational institutions in a joint articulation of the search for the adequate and pertinent profile. Thus, in the coordinated work of both entities, provide a better-quality training to teachers, both at the undergraduate level as well as in continuing education.

The research is projected not only to apply it to new groups of teachers but also to seek to detail research elements and instruments that facilitate it in each of the identified blocks of competencies and to be able to indicate which are the factors that favor or not the achievement of these competencies that make up that block, the effects they cause in the action of the teacher when they are possessed, and when not to detect with greater precision the individual threats and gaps and to consolidate the strengths and opportunities for each one of them.

This analysis of diagnoses carried out, shared with different institutions for the application of the proposed instruments or other similar ones, will give a much more objective vision in the municipal field of the state of competitiveness of the teachers who work in our environment.

Research is the door to a series of processes that have to offer as a result a constant search for the educational quality so longed for the good of human resources, both at the level of those who form and those who are formed, and achieve the goals proposed for productivity and progress in the community.

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