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Initial teacher training in Higher Education

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Abstract

This is an early practice experience carried out with a sample of four students who are in their fourth semester of the bachelor's degree in language and literature, and mathematics at the Industrial University of Santander, Colombia, in the academic activity Curricular Development. The objective is to investigate the perceptions and interests of 35 ninth grade students of basic secondary education in the area of Spanish language, and 32 eleventh grade students of secondary education, in the area of mathematics, in an educational institution in Bucaramanga, where they interact with teachers of the areas and observe the teaching dynamics. The data is obtained through observation and a questionnaire that includes open and closed questions. Some of the answers indicate the need to include in the development of classes, activities that link technological resources, creativity and greater group interaction, as well as address current issues.

Keywords: Initial teacher training, Classroom; School context.

Introduction

The Bachelor's degree programs at the Universidad Industrial de Santander, in the pedagogy component, include the Curriculum Development subject, taken by students in the fourth semester. The teaching is based on theoretical bases and interpretation of different curricular theories, the analysis of curricular guidelines and basic competency standards, which are used when designing area and classroom plans. The practical work brings teachers in initial training closer to the real context of classrooms, with the aim of investigating the perceptions and interests of ninth grade students of basic secondary education in the area of Spanish language and eleventh grade students of secondary education in the area of mathematics.

Theoretical framework: initial teacher training

Teacher training, according to Arenas Castellanos, MV, & Fernández de Juan, T. (2009), constitutes a set of academic courses or events with official validity, which aim to enable the practice and/or update those who perform teaching functions, in theories, procedures and techniques for teaching. Unesco (2020) defines training as "the continuous process of professional learning, through which teachers reflect, maintain and develop professional knowledge, skills and practices."

In Colombia, the Ministry of National Education considers it as a complex system organized into three subsystems: one of initial training, understood as the training of people interested in being educators, at the basic and secondary education levels, in areas or fields of knowledge and in specific population groups; the subsystems of in-service and advanced training. The Ministry (2013) defines guidelines and three fundamental competencies of the teacher, namely: the competence to train, teach, and evaluate.

Methodology

The methodological process is qualitative, and includes analysis of basic competency standards, design of a questionnaire to investigate students' perceptions and interests, and management in educational institutions that allow access to classrooms.

The sample is made up of four teachers in initial training, 35 students from a ninth grade of basic education in language classes, and 32 students from an eleventh grade, in the area of mathematics.

Results

Students in the Spanish language area consider class a space to freely and respectfully express their ideas; they affirm that reading is a way of learning; they want classes to be more fun and dynamic to easily understand the topics; they expect digital, creative activities and greater interaction in work groups. They would like to improve their writing, spelling, and addressing historical topics and current issues.

In the area of mathematics, students express that in class they use information from everyday situations, organized in teaching based on contexts and problematic situations; they develop logical and numerical thinking skills, and mathematical understanding. They consider classes as a space to learn to explain or demonstrate the solution to problems in practical life. They highlight the importance of knowing how to organize and graphically represent data to promote the understanding and communication of mathematical information. They suggest greater use of technological resources and game dynamics that increase interest and motivation for learning mathematics.

Conclusions

The possibility of contextualizing the practical content of the subject is a significant experience for undergraduate students because they are able to venture into a real classroom context and witness the dynamics that occur in a class. Emphasis is required on the development of digital competencies and skills, understood as the sum of knowledge, capacities, skills, attitudes and strategies required for the use of technologies and the Internet, which allow us to think critically about the virtual world and use it in a reflective and participatory way (Unesco, 2021), in the teaching and learning processes.

Early practice is related to the basic and fundamental competences of the teacher defined by the Men because it favors the competence to form, as for teachers in initial training, they enter the classroom of basic and secondary education, observe and interpret the teaching dynamics, and interact with students; the approach provides information to carry out a critical analysis in the class collective and to propose ideas in favor of learning. In relation to the teaching competence, the data constitute an input to design didactic activities that provide greater autonomy and participation of students, enhance the development of basic competences. Regarding the evaluation competence, the social commitment of teaching and the coherence between forms of evaluation, teaching and learning strategies, and the need for feedback to students, as a mechanism to know if there are obstacles in learning and the level of prior knowledge, are reflected upon.

Adding to initial training activities of inquiry, observation and interaction with practicing teachers and students of basic and secondary education, contributes to in-situ training, by placing them in real environments, they will be able to apply knowledge that is part of the training of graduates. Alvarado and La Voy (2006) consider that teachers are the key piece of effective learning in the classroom; the educational sector and civil society recognize the need for quality education that can provide students with relevant knowledge, both to prepare them to enter the labor world as adults, and for their personal fulfillment and growth.

Limitations

The practical development of the subject has the greatest limitation in accessing educational institutions that allow students, teachers in initial training, to enter classrooms, in addition to the skepticism shown by teachers when observing the classroom.

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