CURRENT STATUS OF THE PROFILE OF TEACHING SKILLS IN ARTICULATION WITH THE LEARNING OUTCOMES OF PRIMARY SCHOOL STUDENTS IN THE DOMINICAN REPUBLIC
CARACTERIZACIÓN DEL DESARROLLO DE LAS COMPETENCIAS DOCENTES EN MAESTROS DE EDUCACIÓN PRIMARIA EN LA REPÚBLICA DOMINICANA

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ABSTRACT

Keywords:
teaching competencies, professional profile, curriculum, elementary school.

This article presents the results of an investigation about the profile of teaching competencies, within the framework of a study on its articulation with the learning of primary school students in the Dominican Republic. The objective was to characterize the current state of professional teaching skills for the work of teachers with the primary education curriculum that allows its articulation with the learning outcomes of students at this level. A mixed methodological approach was used that integrated the analysis of quantitative and qualitative data from the opinions of teachers and experts, through the analysis of data from the documentary review technique, the questionnaire and the method of analysis by expert criteria. The research identifies training needs that emerged in an emergent way due to the appearance of COVID-19 and that urgently need to be incorporated into teacher training processes, to promote the application of the components of the curricular design at the primary level. The limited technological competence makes it difficult for teachers to educate new generations and take advantage of the potential of a growing digital life environment.

RESUMEN

Palabras clave:
competencias docentes, perfil profesional, currículum, escuela primaria.

En este artículo se presentan los resultados de una investigación acerca del perfil de competencias docentes, en el marco de un estudio sobre su articulación con los aprendizajes de los estudiantes del nivel primario en la República Dominicana. El objetivo fue caracterizar el estado actual de las competencias profesionales docentes para el trabajo de los maestros con el currículo de la educación primaria que permita su articulación con los resultados de aprendizaje de los estudiantes de este nivel. Se utilizó un enfoque metodológico mixto que integró el análisis de

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datos cuantitativos y cualitativos de las opiniones de docentes y expertos, mediante el análisis de los datos de la técnica de revisión documental, el cuestionario y el método de análisis por criterio de expertos. En la investigación se identifican necesidades de formación que surgieron de manera emergente por la aparición del COVID-19 y que urge sean incorporadas en los procesos formativos docentes, para impulsar la aplicación de los componentes del diseño curricular del nivel primario. La limitada competencia tecnológica dificulta el desempeño docente para educar nuevas generaciones y aprovechar las potencialidades de un creciente entorno de vida digital.
Introduction

Currently, teachers around the world, particularly in the Dominican Republic, are facing an educational scenario impacted by the health crisis that generated the COVID-19 and led to social isolation measures, which institute complex challenges to the teaching activity. In this scenario, teachers and professors have had to reinvent new ways of teaching and learning, taking into account the optimal combination of face-to-face and virtual modalities, evidencing the limited competencies they possess in a school context mediated by technologies.

This situation demands outlining a profile of teaching competencies for professionals who work in primary level educational centers adjusted to a new reality, since "when the teacher performs in the new teaching and learning environment his or her functions change, so it is necessary to redefine his or her professional task, as well as the competencies he or she must possess" (Colín, 2019, p. 4).

Primary education is an essential period for the physical, psychological and social development of the student based on the construction of knowledge that prepares him/her for future access to secondary education. According to the European University Miguel Cervantes (2022), the primary school teacher plays a fundamental role in this mission, being responsible for producing new learning and developing the intellectual, affective, social and critical skills, among others, necessary for personal success.

Professionals graduating from Dominican universities fail to meet the high expectations regarding their performance and the quality of the learning acquired is questioned by the productive sectors. For teacher training there are theoretical proposals, research and concrete experiences that can contribute to the design of curricula for initial training (Castillo, 2013). Therefore, there is a need to evaluate the preparation being offered to teachers and, more importantly, how the agents involved themselves are doing in order to introduce the necessary changes.

Teaching competencies have been consolidating in the current educational panorama based on research on their definition (Zabalza, 2003), general classification (Sarramona, 2004), the most important competencies for teachers (Medina, 2009) and those that typify the primary education professional (Martín del Pozo et al., 2009); studies that have become references for approaching this field of reflection in the different educational areas. These investigations have been analyzed in a study published by Nieto et al. (2012), concluding that in the primary education stage, the student is confronted with fundamental learning — mother tongue, introduction to elementary notions of calculus, physical education, scientific observation, notions of history, geography and art, forms of expression such as rhythm, modeling, drawing, handicrafts and manual work— the forms of expression such as rhythm, modeling, drawing, manual work, and finally, the acquisition of fundamental elements of civic and social life that help the integral growth of the child at this stage.

The low results of competitive examinations to select applicants as teachers for the different areas and levels of the Dominican educational system and the insufficient learning achievements of students at the primary level (United Nations Educational, Scientific and Cultural Organization [Unesco], 2019), prove the shortcomings in competency-oriented teacher training and, consequently, their training needs.

The profile of professional teaching competencies, in essence, contains the description of the demands of the primary education level in today's Dominican education. Based on its adequate definition, it will be possible to project lines of action in the area of teacher training and will facilitate the formulation of other criteria to guide the
selection of education professionals (Criollo, 2019). The teaching profile must guarantee improvements to the teaching and learning process in an increasingly complex school network influenced by technologies, projecting the appropriate adjustments that lead to the appropriation of learning demanded by today’s society.

According to Cedeño (2012), in order to understand the meaning and difficulties of teacher training in terms of the fundamental competencies that education professionals should have, it is necessary to analyze the demands that give rise to this transformation. It is a concern of the education sector to analyze the fundamental competencies and the professional profiles of teachers that favor the development of other competencies specific to their context.

Stern’s (2020) asserts that today's teachers face a great challenge, which involves breaking the paradigm of what school is today, since it is necessary to reorient classes so that the transfer of learning is at the heart of teachers’ work. This change is not so difficult to achieve, being possible by reorienting the current curriculum or otherwise restructuring the school to make it happen.

Consequently, modifications to the profile of teaching competencies and to the training processes have their starting point in the knowledge of the level of development of these competencies. Thus, the objective of this article is to characterize the current state of professional teaching competencies for the work of teachers with the primary education curriculum that allows its articulation with the learning outcomes of students at this level, as part of a larger study that the first author deploys within the process for obtaining the degree of doctor in educational sciences.

Method

The unit of analysis or element of study is the primary school teacher in the Dominican educational system. This is a descriptive study for which 566 teachers working in 88 public and private schools in Educational District 06-04 La Vega Oeste were taken as the population. The sample is selected by means of the simple random method of sampling/analysis units, in which all elements of the population have the same possibility of being chosen based on the characteristics of the population and the sample size (Hernández-Sampieri et al., 2014). The research sample consisted of 240 primary school teachers.

The instruments used were the documentary review, the questionnaire and the analysis by expert criteria. The documentary review was used to describe the profile of teaching competencies and teaching performance, information that makes it possible to substantiate the results by contrasting them with existing theory. The documents and research reviewed were as follows:

The review of these documents contributed to characterize the teacher profile required to implement the pedagogical model at the primary level under the competency-based approach, as established in the curricular design to promote learning improvement, which has lagged behind in the context of the COVID-19 pandemic. The main reference is the teacher performance evaluation carried out in 2017 by the Minerd since it is the last study carried out at the national level due to the situation generated by the pandemic.

A questionnaire was used as an instrument, which was applied to the 240 teachers who made up the study sample, with the objective of characterizing the current state of the teachers' professional competencies for the work of teachers with the primary education curriculum that allows its articulation with the learning outcomes of students at this level.

To test the reliability of the questionnaire applied, a pilot test was conducted with ten teachers and the results were subjected to a statistical test of internal consistency, calculating Cronbach’s alpha reliability coefficient, which takes values ranging from 0 to 1, where a coefficient of 0 means no reliability and 1 represents total reliability. In addition, eight qualified specialists in the field were asked to review and validate this instrument, whose contributions and recommendations were taken into consideration prior to its application.

The questionnaire is structured in two sections, the first to obtain general information, both personal and professional; and the second is dedicated to inquire about elements that define the profile of teaching competencies, according to the classification of Mescyt (2014), adopted in the study, i.e. intellectual, pedagogical and technological.

The purpose of the expert analysis was to determine how primary school teachers apply the components of the curriculum design and what technological resources and means they incorporate in their training and educational practice. Ten education professionals with doctoral degrees were selected as experts. With professional experience in teacher training (4), educational supervision (4) or in both areas (2).

The procedure consists of applying the guide during three consecutive rounds, leaving out in each round the questions that coincide, until a consensus is reached on the indicators that will serve as input to design the profile of teaching competencies at the primary level. An ordinal scale is used with categories from one (lowest) to five (highest) and they are asked to rate the state of formation of the competencies of the primary level teacher in each of the three categories that define the competency profile and that are summarized in Table 1.
Table 1

Categories of the competency profile of the primary level teacher

<table>
<thead>
<tr>
<th>Type of competition</th>
<th>Indicators</th>
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<tbody>
<tr>
<td>Intellectual</td>
<td>A) Level of theoretical and practical knowledge about the competency-based approach established for the primary level.</td>
</tr>
<tr>
<td></td>
<td>B) Organization of the pedagogical practice taking into account the moments of the class.</td>
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<td></td>
<td>C) Use of argumentation as a strategy for the development of fundamental and specific competencies established in the primary level curriculum.</td>
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<td></td>
<td>D) The primary level teacher promotes analysis and synthesis for the comprehension and production of oral and written texts.</td>
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<tr>
<td>Pedagogical</td>
<td>E) Organization, planning and evaluation according to the components of the primary level curriculum design.</td>
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<td></td>
<td>F) Mastery of the competency-based approach and curricular areas.</td>
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<td></td>
<td>G) Knowledge and application of curriculum components.</td>
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<tr>
<td>Technological</td>
<td>H) Application of technological resources and means in pedagogical practice.</td>
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<td></td>
<td>I) Frequency of use of technological means for training.</td>
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Results

From the documentary review, the evaluation of teaching performance (Minerd, 2017) is obtained, which allows defining the contribution to the achievement of the professional standards required in the Dominican educational system. Although the baseline study included teachers from all over the country, the present research is limited to regional 06 La Vega and the findings of educational district 06-04 La Vega Oeste, in order to characterize the current state of teachers’ professional competencies and teachers’ work with the primary education curriculum.

These standards require a minimum compliance that evidences teaching competencies to promote the learning of their students, which are defined to serve as a reference in the promotion of training actions, improvement of teaching performance and promotion of their professional development. Figure 1 shows the evaluation of teaching performance.
As can be seen, 2.9% of the teachers obtained a category of outstanding, while 38.1% received the category of competent, which adds up to only 41% of the teachers with a level of professional performance that endorses a good development of teaching competencies. These data allow us to affirm that the majority of teachers in the Dominican educational system show a low professional performance, since 73.2% are between the basic and insufficient categories, from which it can be inferred that three quarters of teachers are not achieving the results expected by the educational system.

This information serves as a reference to guide educational policies in teacher training, the school curriculum and the school day, being coherent with the shortcomings of the education professional identified by Arias (2021) with respect to the teacher profile, motivations, disposition and training. The main results of the teacher performance evaluation (Minerd, 2017) contribute to the definition of a new profile through the identification of training needs and the promotion of teacher professional development.

The results of the questionnaire applied to 240 Dominican primary school teachers are presented below. Figure 2 shows the data on the academic degree that evidences notable distortions between initial training and the educational level at which it is taught. Thus, 37 teachers were trained for the secondary level (15.4 %) and 26 teachers were trained for the initial level (10.8 %), while 11 teachers come from other careers and have teaching qualifications (4.6 %).
The main result offered by these data is that 30.8% of primary level teachers were not initially trained for the development of the curricular plans set forth by the Ministry of Education for this level, and consequently, they do not have the entry profile according to the requirements established in the statute of the teaching regulations. Specifically, only 21.3% say that they have been trained in one of the two cycles that make up the primary level, which reveals a lack of training, since teaching skills for this level are acquired during professional practice. The Figure 3 shows that 78 of the 240 teachers in the sample, upon entering the primary level, were not assigned to the grade, taking into account their competencies and that the decision was due to the fact that there was space available for them to work.

**Figure 3**

*Reasons for being assigned to the grade in the school where he/she works*
These data show that 162 teachers (67.5%) took into account their training profile when they were assigned to work at the primary level, and it is important to highlight two main findings. First, it is significant that a number of teachers work at the primary level without the proper initial training that would give them a suitable profile for the job they perform. Second, the school administration, when placing teachers, does not take into account the professional competencies that certify the adequate performance of their functions, and it is based on non-academic factors, due to coverage needs.

Regarding the professional competencies reflected in the initial teacher training process at the primary level, 100 teachers (41.7% of the total sample) responded that they did not have a high level of knowledge and understanding of the stages of physical and psychological development of their students, as shown in Figure 4.

**Figure 4**

*Knowledge and understanding of the developmental stages of their students*

The data indicate that 140 teachers master the characteristics corresponding to the cognitive, linguistic, social, emotional and physical development of their students, which favors compliance with Minerd (2016) regulations to enhance learning, data shown in Figure 5. At this level, a complex process of construction of new knowledge begins, where thinking becomes less intuitive and advances towards more logical levels, showing significant advances in the abilities to relate cause and effect, categorize, serialize and make inferences.
As can be seen, 139 teachers, equivalent to 58%, do not fully master the particularities of their students’ development, which limits their competencies. Only 101 teachers (42%) express knowledge of the basic patterns of development and learning at this stage. Regarding pedagogical competencies, Figure 6 presents the level of knowledge and understanding of the curriculum design at the primary level, showing that 79 teachers (32.9%) express not having full knowledge of the curriculum they teach; an indicator to be related to the students’ limitations in learning. This scenario compromises the performance of teachers, entrenching the perception that their practices are inefficient and ineffective and increasing the discredit of the profession.

These data confirm that an important challenge is to incorporate pedagogical competencies in reading, writing, mathematics and science into the profile of teachers at this level, since, for example, only the reading curriculum contains five domains that
Teachers must develop in their students: decoding, literal and inferential reading comprehension, reflection and evaluation, textual diversity and reading strategies (Unesco, 2019). Likewise, an adequate management of reading strategies is required for elementary school teachers to emphasize the reading of diverse texts that prepare students for the appreciation and aesthetic enjoyment of varied genres, which are present in culture as well as in daily life.

Figure 7 presents the frequency with which teachers identify, understand and use various techniques, instruments and types of assessment to evaluate their students’ learning. It can be seen that a significant number of teachers (40.4%) consider themselves insufficiently prepared in relation to the knowledge of the learning assessment process for the development of competencies, which implies using different instruments and means according to the competency to be assessed and in contexts similar to the real life situations of the students.

**Figure 7**
Preparation for assessing student learning

These results show that 143 teachers (59.58%) self-assess themselves with a high level in the use of techniques, instruments and types of assessment to assess their students’ learning; followed by 87 teachers (36.25%) who claimed to use it on a less frequent scale and only 10 teachers (4.17%) do not frequently use a variety of learning assessment strategies. The Dominican curriculum design suggests the development of eleven assessment strategies in order for the teacher to identify what the student has achieved and what he/she has yet to achieve.

The results of the instrument applied to 10 experts in Dominican primary education are presented below. In their opinion, the level of application of technological resources and means by teachers is low, since they rated 40% on the scale of two and 50% on the scale of three. Just 10% on a scale of four as shown in Figure 8. This data contrasts with the reality following the pandemic that in the 2020-2021 school year required its use to continue education in virtual conditions, which generated changes that marked a new stage for the competencies required in teachers at all educational levels and which requires adjustments in primary education.
Limited technological competence is an obstacle to the improvement of teaching performance, because as Rodriguez (2016) expresses, technology not only stimulates creativity and innovation, but also contributes to intercultural dialogue and plays an important role in overcoming individual learning problems so it is increasingly important, not only as a skill in itself, but as a facilitator of other skills such as teamwork and learning to learn, among others. The technological competencies required by teachers are changing rapidly and their incorporation is urgent in order to meet the aspiration of promoting better student learning and developing other professional competencies.

Figure 9 shows the main reason why teachers do not use technological tools in their pedagogical practices, i.e., 50% of the experts agree that these media are practically absent in their training and the other 50% state that they are used very infrequently. In the absence of the development of technological competencies in training processes, there is no guarantee that teachers will use Information and Communication Technologies (ICT) to design and manage teaching strategies, plan, choose and structure materials, use the Internet as a teaching resource, handle information in digital format, use social networks and learning platforms, among other resources to be incorporated into the teaching and learning process.
Figure 9 shows that the experts' rating on the use of technological resources for 50% is the lowest and with the intermediate scale for the other 50%. None of the experts used the highest categories of the scale (4 and 5) to evaluate this training. Currently, this deficiency has an unfavorable impact on professional competencies, since, as Tejada (2009) argues, the training possibilities of ICTs free teachers from repetitive, strictly informational tasks, so that tutoring, guidance, motivation, programming and evaluation become more important. The role of the incorporation of this competence is to increase the teacher’s capabilities in the production and edition of digital content, as well as in the management of different technological platforms that increase the communication channels in the educational community and promote a research culture as an inherent part of the professional activity.

The characterization of the current state of professional teaching competencies for teachers’ work with the primary education curriculum, in terms of their articulation with student learning outcomes, requires the selection, definition and description of the competencies that dimension their profile. In this sense, we agree with Martínez et al. (2016, p. 177) that "such competencies are associated with the functions and tasks of teachers, in addition to the generic-transversal relationship that contribute to the achievement of educational goals in Education".

With regard to the functions and tasks of teachers, the competence for curriculum management and implementation stands out, showing that 32.9% of the teachers expressed that they did not have full knowledge of the curriculum design they teach. This shortcoming limits them not only so that students can appropriate the elements of cultural heritage, but also so that they can become responsible, active and committed members of society and, subsequently, professionals who contribute to the development and transformation of society in general.

Competence in educational assessment is an essential component in the teaching profile, through which significant information is observed, collected and analyzed regarding the possibilities, needs and achievements of students. Teachers consider themselves insufficiently prepared to reflect, make value judgments and take pertinent and timely decisions in the use of different instruments and means in accordance with
the competence to be evaluated and in contexts similar to the real situations experienced by the students.

Regarding the professional competencies that contribute to the achievement of the educational goal, the data revealed that 41.7% of the total sample do not have a high knowledge and understanding of the developmental stages of their students. It is agreed with Campo (2009) that knowledge of these stages of children's development and learning are of utmost importance for school progress, since students who do not develop, for example, mature motor patterns in this period will have difficulties in acquiring more complex skills necessary to successfully advance to other stages of ontogenetic development.

Finally, with regard to technological competence, 40% of teachers do not apply technological resources and means in their pedagogical practice. The greatest challenge in the current circumstances is the teacher's motivation and attitude towards educational innovation with the use of ICT, which should increase as he/she increases his/her instrumental-didactic training and discovers the effectiveness of using ICT models that can be easily reproduced in his/her context and help him/her in his/her teaching work.

**Discussion and conclusions**

From the integration of the data from the documentary study, the questionnaire applied to the teachers and the analysis by expert criteria, two ideas are formulated that articulate the results: First, the professional competencies attained by the primary level teacher are essential to lead educational processes consistent with the guidelines of the Dominican educational system that allow them to develop a teaching and learning process adjusted to the curriculum. Second, the teachers in the study present low levels of mastery in the organization of pedagogical practice taking into account the demands of the classroom in the current scenario, whose deficiencies are manifested from the initial training and, therefore, have repercussions on the learning results at this level.

Among the factors associated with professional teaching competencies that articulate with student learning outcomes, in coherence with the components of the primary level curriculum design, are the use of argumentation as a strategy for the development of fundamental and specific competencies; analysis and synthesis for the comprehension and production of oral and written texts; the organization, planning and evaluation of varied activities; and the application of technological resources and means in pedagogical and daily practice.

The professional teaching competencies that define the profile of the teacher in the Dominican Republic are limited by the low mastery of the curriculum for this level, noting that some teachers do not use the evaluation strategies provided by the curriculum design to measure the level of competencies acquired by students. Therefore, in the Dominican context, a good teacher must have a profile that allows him/her to develop fundamental and specific competencies in a way that guarantees greater and better learning opportunities for students and that will be useful to them throughout their lives.

Technological competencies constitute the most insufficient component in the current state of professional teaching competencies, which is manifested both in the training processes and in performance, affecting the low learning outcomes of students. The use of technological resources continues to be a challenge that is becoming increasingly relevant in educational practices and leads to rethinking the ways of facing
the challenges associated with the emergence of the knowledge society, in order to offer a useful education for students in their future citizenship activities.

The creation of a profile of professional competencies of primary school teachers in their articulation with student learning has become a current demand that allows for the creation of new professional development opportunities to improve performance. The study recognizes the need to project lines of action in the area of teacher training that will make possible the formulation of criteria to guide the selection of education professionals, in accordance with the demands of educating students prepared to take advantage of their potential for their own benefit and that of society as a whole.

The lines of action that articulate teacher training should be oriented towards a deeper knowledge of the curriculum being taught in terms of student diversity, greater mastery of the assessment strategies proposed by the curriculum and their creative design depending on the specific contexts and heterogeneity of the student body and, finally, the development of technological competencies that enhance the processes of educational innovation. Complementary lines of action include the strengthening of the cultural scope and moral dimension of teaching, as well as the modes of collaboration in decision making and joint action with other teachers, and finally, strategies for inclusive education that take into account the diversity of students. The resulting advances in the development of professional competencies will promote a more effective and efficient performance of the teacher's activity.

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