

ANÁLISE COMPARATIVA DAS COMPETÊNCIAS DOCENTES EM PROGRAMAS DE PÓS-GRADUAÇÃO EM EDUCAÇÃO NO MÉXICO E NA COLÔMBIA

COMPARATIVE ANALYSIS OF TEACHING COMPETENCIES IN POSTGRADUATE PROGRAMS IN EDUCATION IN MEXICO AND COLOMBIA

ANÁLISIS COMPARATIVO DE COMPETENCIAS DOCENTES EN POSGRADOS EN EDUCACIÓN DE MÉXICO Y COLOMBIA

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Resumo: As competências docentes tiveram de ser intensificadas, ajustadas ou adquiridas para responder aos desafios trazidos pela pandemia da COVID-19, adaptando-se às novas realidades do contexto global. A análise do currículo planejado, aplicado e alcançado em programas de formação inicial de professores em educação a distância virtual permitiu compreender a relevância das competências docentes durante e após a pandemia. O objetivo foi revisar as competências aplicadas pelos professores e como se estabeleceu a coerência entre as competências propostas, aplicadas e alcançadas no currículo durante o período de 2016 a 2023. Foi proposto um estudo comparativo entre duas universidades, uma colombiana e outra mexicana, utilizando técnicas como revisão documental e grupos focais com professores em exercício e em formação inicial. Foram estabelecidas semelhanças e diferenças entre os resultados da análise comparativa heurística. Para a compreensão, foi proposta a codificação aberta, axial e seletiva, em consonância com a teoria fundamentada. A hermenêutica foi implementada para compreender a complexidade histórica, dialética e linguística implícita nos textos, e o software N-Vivo foi utilizado para o processamento dos dados. As competências docentes para a profissão foram identificadas como ensino, avaliação e formação. Em torno dessas competências essenciais, integram-se outras competências gerais e específicas necessárias para lidar com situações em diversos contextos. Conclui-se que as competências são construídas ao longo da prática docente e aprimoradas pela interação com os alunos e suas realidades, tornando-as relevantes. Há uma desconexão entre o currículo planejado, o aplicado e o alcançado. Os pontos de convergência entre as categorias centrais na Colômbia são as competências de pesquisa e comunicação; no México, são as competências de ética e design. Da mesma forma, entre formação e avaliação, inovação e pesquisa são pontos em comum.

Palavras-chave: Análise comparativa, competências docentes, educação a distância, pandemia, currículo, pós-graduação.

Abstract: The teaching competencies had to be heightened, adjusted, or acquired to address the challenges brought about by the COVID-19 pandemic, aligning with the new global realities. Analyzing the proposed, applied, and achieved curriculum in postgraduate teacher training programs in virtual distance education, allowed for an understanding of the relevance

of teacher competencies during pandemic and after pandemic. The objective was to review the competencies that teachers applied and how coherence was established between the proposed, applied, and achieved competencies in the curriculum from 2016 to 2023. A comparative study between a Colombian and a Mexican university was conducted using documentary review and focus groups with practicing and trainee teachers. Similarities and differences were established through heuristic comparative analysis. For comprehension, open, axial, and selective coding were employed in accordance with grounded theory; the hermeneutics was implemented to understand the historical, dialectical, and linguistic complexity implicit in the texts. The N-Vivo software was used for data processing. Teaching competencies for professional practice were identified as teaching, evaluating, and training, with other general and specific competencies intertwined. In conclusion competencies are built throughout the teaching practice and are refined through interaction with students and their realities, making them relevant. There is a disconnection between the proposed, applied, and achieved curriculum; the points of convergence between the central categories in Colombia are research and communicative competencies; in Mexico, ethics and design, also between training and assessment, innovation and research.

Keywords: Comparative analysis, teacher competencies, distance education, pandemic, study program, postgraduate degree.

Resumen: Las competencias docentes se tuvieron que exacerbar, ajustar o adquirir para responder a los retos que trajo la pandemia del COVID19, articulándose con las nuevas realidades del contexto mundial. Analizar el currículo pretendido, el aplicado y el logrado en los programas de formación de docentes a nivel de posgrados en modalidad de educación a distancia virtual, permitió comprender la pertinencia de las competencias del docente en tiempo de pandemia y postpandemia. Con el objetivo de reseñar sobre las competencias que los docentes aplicaron y cómo se establece coherencia entre las competencias propuestas, aplicadas y logradas en el currículo durante el período 2016-2023. Se propuso un estudio comparativo entre dos universidades, una colombiana y otra mexicana, haciendo uso de técnicas como la revisión documental y grupos focales con docentes en ejercicio y docentes en formación. Se establecieron semejanzas y diferencias entre los resultados del análisis comparativo heurístico. Para la comprensión se planteó la codificación abierta, axial y selectiva, en coherencia con la teoría fundamentada; se implementó la hermenéutica para la comprensión de la complejidad histórica, dialéctica y lingüística, implícita en los textos y se usó, el software N-Vivo para el procesamiento de los datos. Las competencias docentes para el ejercicio de la profesión se identificaron como enseñar, evaluar y formar, alrededor de ellas, se conjugan otras generales y específicas, que son necesarias para afrontar situaciones en diversos contextos. Se concluye que las competencias se construyen a lo largo del ejercicio docente y se perfeccionan con la interacción con los estudiantes y sus realidades, haciéndolas pertinentes, hay desarticulación entre el currículo pretendido, el aplicado y el logrado; los puntos de encuentro entre las categorías centrales en Colombia son la investigación y las competencias comunicativas, en México, la ética y el diseño; asimismo entre formar y evaluar, la innovación y la investigación.

Palabras clave: Análisis comparativo, competencias del docente, educación a distancia, pandemia, programa de estudios, posgrado.

1. INTRODUCTION

The competency-based educational model governs and guides the plans and programs of undergraduate degrees globally. It is assumed that, during the university training process, future professionals acquire certain skills, aptitudes, and attitudes to apply their knowledge in a specific area (Rodríguez and Sánchez, 2019). In the case of training for trainers, it is about ensuring the development of the necessary capacities to apply pedagogical knowledge for teaching subject content, in accordance with the standards and guidelines of educational authorities who define what should be taught.

Teaching competencies, according to the Instituto Colombiano para la Evaluación de la Educación - ICFES (2018) and international references, have been condensed into three main areas of the profession: teaching, training, and evaluating. Around these, more specific ones are detailed, which must have the adaptability to face the new challenges posed by teaching, due to technological advances, artificial intelligence, social thinking, politics, public management, among others. An example of this was the COVID-19 pandemic, which during 2020 and 2021, transformed traditional teaching modalities, quickly moved classrooms to virtuality, and highlighted the importance of digital and socio-emotional competencies that had not previously received necessary relevance (Mérida-Martínez and Acuña, 2023).

In Colombia, several research studies have been conducted that have analyze the acquisition of teaching competencies in undergraduate and postgraduate programs, based on the results of the Saber Pro exams. This national test is created, applied, and analyzed by the ICFES (2024), which organizes them into generic competencies (areas of knowledge) and specific competencies (discipline-specific, which in the case of education training are: teaching, training, and evaluating), according to the guidelines of the Ministerio de Educación Nacional, constantly reviewed by academic communities, networks, and associations of faculties and programs (Cifuentes et al., 2020).

Thus, Valbuena-Duarte, et al. (2021) they conducted a comparative study on the face-to-face and virtual modalities at Universidad de Colombia and Universidad de México, as objects of this study, which offer their education programs in distance and virtual modalities.

In Mexico, on the other hand, Mérida-Martínez and Acuña (2023) analyzed the various relationships and connections that exists between the levels of digital competencies and the territorial conditions characterizing the state where the faculty is located. A finding was that 24.29% of the participants carried out their professional activities in rural areas of the federal entities with the greatest lag in national education and the highest levels of poverty. This resulted in an increase in inequalities due to the lack of digital competencies and a scarcity of technological resources to carry out the activities corresponding to the educational cycles.

In this regard, it should be noted that, during the outbreak of the pandemic, the relevance of digital teaching competencies, according to the Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado National Institute of Educational Technologies and Teacher Training - INTEF (2017) cited by Mérida-Martínez and Acuña (2023) along with the availability of tools and information and communication technologies, is configured as a necessary element for the development of all educational modalities, and a central part in the transition to distance and virtual modalities that educational institutions had to undertake in the context of the pandemic. Therefore, there is a gap in the literature on studies of teaching competencies and digital competencies for postgraduate programs in Mexico and Colombia.

From the above, it is highlighted that one of the main challenges and difficulties lies in the lack of studies on similar programs and modalities in postgraduate programs. This is a fundamental aspect for universities, institutes, and teachers to engage in processes of production and research on educational modalities for postgraduate students across Latin America, thereby strengthening training processes which, according to various standardized tests, yield low results for the educational sector.

Based on the aforementioned, this article derived from the research conducted aims to answer the following question: What relationships can be established between the proposed, applied, and achieved teaching competencies in postgraduate education programs, comparing a Colombian university and a Mexican university?

In this regard, the present research aims to determine the coherence between the intended curriculum (legal framework), the applied curriculum (study plans and programs), and the achieved curriculum (standardized test results, graduates' perceptions, among others), over a specific period, under the assumption that competencies, are life skills and that, therefore, the pandemic meant to exacerbate, adjust or acquire these competencies in the educational field due to the disruption of life itself. This will be done through a comparative study between an institutional experience in Mexico and one in Colombia in similar undergraduate and postgraduate programs, using hermeneutic and codification tools for a documentary review and the application of focus groups with students, graduates, and teachers.

This research help understand common aspects and points of divergence between the postgraduate programs in Mexico and Colombia. Ultimately, it grants voice and recognition to the educational actors, in this case, students, graduates and teachers through the methodology used, which allows visualization of the perceptions, experiences and needs, to comprehend the educational reality and strengthen the social relevance to the research.

2. METHOD

To understand the relevance of teaching competencies in the post-pandemic era, it was necessary to observe and analyze their approach in the institutional documents known as curriculum, program educational projects and master documents of postgraduate teacher

training programs as well as the competencies declared by practicing teachers and trainee teachers.

The research techniques implemented included a documentary review of 12 units of analysis, which were finally contrasted with 5 units of observation that corresponded to the international guidelines on teacher training worldwide, and focus groups that were conducted in Colombia and Mexico during 2023, around five questions, referring to the conceptualization of competencies in the educational context, their experience of application or exacerbation in the context of the COVID - 19 pandemic, how they are evaluated, in which document they should be postulated and what are their main teaching competencies.

2.1 Methodology

An observational, descriptive and comparative study was proposed with the purpose of analyzing the teaching competencies within the intended or proposed curriculum, the applied curriculum, and the achieved curriculum in the postgraduate education programs of two universities, one Colombian and one Mexican, in virtual distance modality.

At this point, it is important to recognize that comparison is a research method in which it is necessary to define three dimensions, which constitute the decisions that the researcher makes for the understanding of the phenomenon under study according to (Bartolini, 1994; Lijphart, 1971; Sartori and Morlino, 1994). The longitudinal dimension corresponding to time, the horizontal dimension to space, the third decision referring to the categories or variables to be considered which, along with the conceptual theoretical framework, must be well articulated and supported by previous research, which become the theoretical dimension, as represented in Table 1.

Table 1. Dimensions of the comparison object of study

Study: Analysis of teaching competencies in postgraduate education programs		
Dimension	Corresponds to	Define in the study as
Longitudinal or temporal	Time	2016-2023
Horizontal or spatial	Space	Colombia y México
Theoretical dimension	Theoretical framework	Teaching Competencies Teaching Competence Evaluation Competence Training Competence

Comparing implies thinking and delimiting the characteristics or attributes that can be compared and not, it implies assimilating and differentiating the limits of the process. Shared and non-shared or non-comparable attributes must be defined (Bartolini, 1994, cited by Gamboa, 2014). For Sartori (1994) cited by Torres (2021) the comparative method is a specialization of the scientific method of empirical or logical order, depending on the method of control of the comparison that is implemented, added are four: the experimental, the statistical for the sciences in general, and for the social sciences the comparative method and the historical method; recognizing that the historical method contributes to the knowledge of a wide and complex information, through time. In which it is fundamental to define the substantial aspect of the comparison, which is feasible by selecting systems that are highly similar, or different, in all the variables, except in the phenomenon under investigation.

Complementing, similarities and differences were established between the results of the heuristic comparative analysis that according to Skocpol (1984) this approach favors the understanding of deep and complex events, through valid associations to explain, establishing what Mill (2012) calls the concordances and differences between the information collected in the research process to approach the conclusions, in the words of Tabares (2015) it is about finding causal regularities.

2.2. Participants and procedure

The Universidad in Colombia and the Universidad in México offer postgraduate programs in education, under the virtual distance modality, as described in Table 2. The information on the intended curriculum was contrasted with the information reported by international organizations: World Bank (WB), Inter-American Development Bank (IDB), Instituto Colombiano para la Evaluación de la Educación (ICFES), the Organization for Economic Cooperation and Development (OECD) and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

Table 2. Comparison of teaching competencies in proposed, applied, and achieved curriculum at Colombia and México

Units of analysis in the documentary review and focus groups		
Colombia University	Postgraduate	Program Master Document (DMP) - Master's in Education - 2018
		DMP - Master's in Intercultural Education - 2018
		DMP - Master's in Pedagogical Mediation in English Learning - 2018
		Educational Program Projects (PEP) - Specialization in Distance Higher Education - 2020
		PEP - Specialization in Education, Culture, and Policy - 2020
		PEP - Specialization in Pedagogy for the Development of Autonomous Learning - 2020
Mexico	Postgraduate	Curriculum - Specialization in Teaching English - 2016

University		Curriculum - Specialization in Teaching Mathematics - 2016	
		Curriculum - Master's in Attention to Diversity and Inclusive Education - 2018	
		Curriculum - Master's in Teaching - 2016	
		Curriculum - Master's in Early Childhood Education - 2019	
		Curriculum - Master's in Teaching Spanish and Literature - 2020	
International Curriculum	Organizations	-	Proposed
			BM- 2020
			BID – 2020
			ICFES – 2018
			OCDE – 2019
			UNESCO – 2022
Focus groups	Colombia	Applied Curriculum	FG - University- Practicing Teachers in Colombia
		Achieved Curriculum	FG - University - Teachers in Training in Colombia
	Mexico	Applied Curriculum	FG - University - Practicing Teachers in Mexico
		Achieved Curriculum	FG - University - Teachers in Training in Mexico

The practicing and trainee teachers participating in the focus groups were 41, 26 practicing and 15 in training, organized into 12 groups, 6 were carried out in Colombia and 6 in Mexico. All participants signed the F-11-1-5 form corresponding to the informed consent, approved by the research ethics committee of university, in coherence with the guidelines of the Colombia's Data Protection Law, 2012.

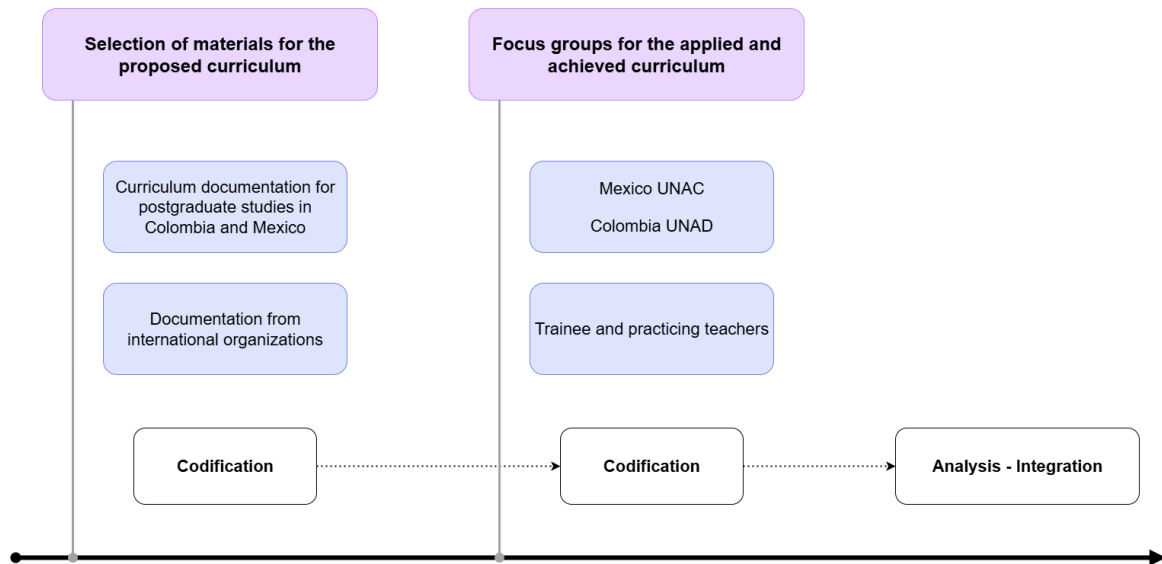
2.3. Data analysis and tools

The teacher training curriculum analyzed in the process for Colombia were called Program Master Document (DMP, referred to by its Spanish abbreviation) and Educational Program Projects (PEP, referred to by its Spanish abbreviation) and those for Mexico, study plans. They were interpreted through hermeneutics, which is considered the appropriate method for understanding the historical, dialectical and linguistic complexity implicit in the texts, through which the researcher dialogues with the text, questioning it in search of answers to their questions, interpreting the text in a journey between the parts and the whole, making use of grounded theory (Hermida and Quintana, 2020; Palacios, 2021).

The analysis of the data by categories involves three phases: data reduction, descriptive analysis and interpretation, which requires the definition of categories and subcategories, which was implemented with a codification plan, the transcription of the focus groups and the elaboration of descriptive matrices by hierarchies (Estrada-Acuña et al. 2021; Monge, 2015; Rueda-Armas and Sigala-Paparella, 2023). And in coherence with Strauss and Corbin (2016) the codification performed was open, axial and selective. In the open coding, categories were generated according to the predominance of competencies in the documents, which corresponded to the analysis of the proposed curriculum; in the axial coding, with the purpose of giving meaning to the interpretation of the competencies and the organization of

the teachers' discourses, subcategories were defined that were systematically linked to the initial categories, analyzing the proposed and achieved curriculum, to finally form a larger theoretical scheme based on the selective coding, as a process of integration and refinement, as detailed in Figure 1. The use of N-Vivo software was implemented for the process.

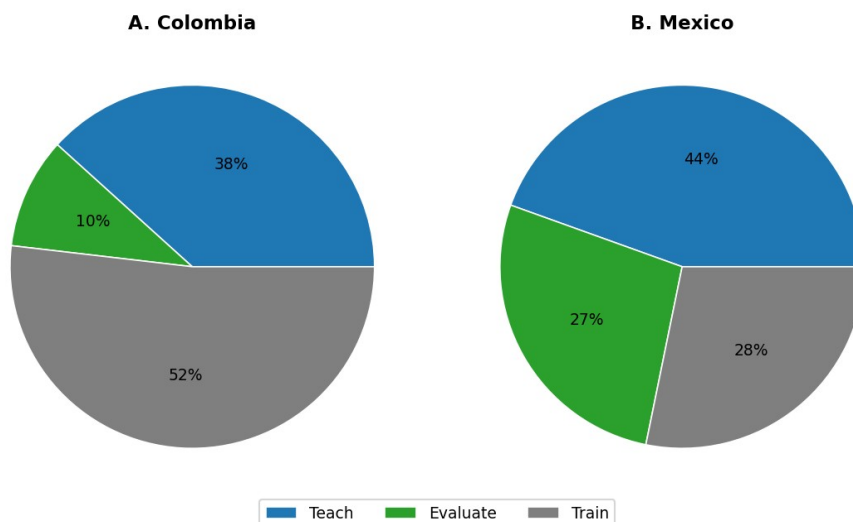
Figure 1. Selected material and analysis process



3. RESULTS

The proposed curriculum was analyzed using institutional documents from University on postgraduate teacher training DMP and PEP of Colombia, and study plans from University of México. showing that the competencies of teach, evaluate, and train are distributed according to their frequency in the units of analysis, as detailed in Figure 2.

Figure 2. Open codification based on institutional documents of training programs



Upon contrasting with information from documents published by international organizations, it was found that the training competencies are predominantly emphasized, as described in Figure 3.

National and International Organizations

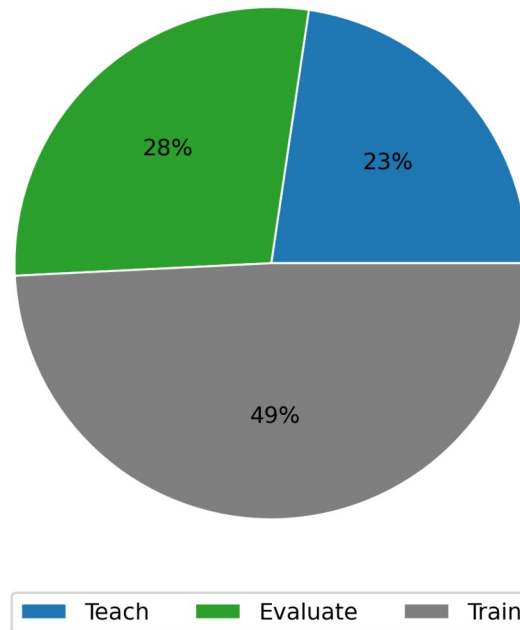
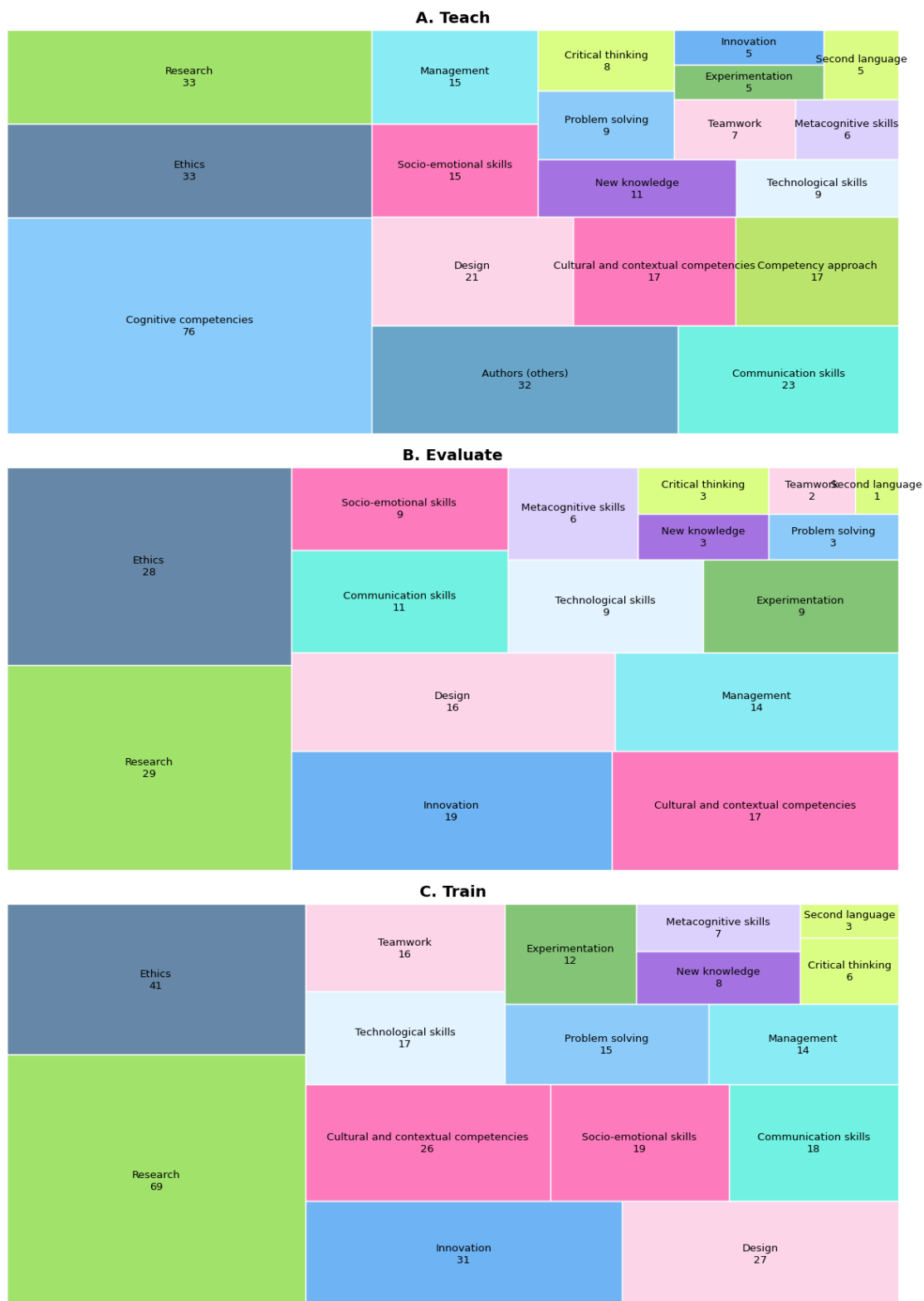


Figure 3. Open coding based on documents from national and international organizations regarding teaching competencies

The hierarchical maps that were generated based on the axial codification in N-vivo, for the proposed, applied and achieved curriculum, are described in Figure 4 in terms of the competencies of teaching, evaluating and training. For each teaching competence, subcategories were broken down, corresponding to general and specific competencies of the profession.

Figure 4. Hierarchical map of findings of the proposed, applied and achieved curriculum on teaching competencies



Based on the codification, it was found that in the university of Colombia postgraduate programs in education in the category of training, the most relevant subcategories were: Research, innovation and design. In the case of university of México: Design, ethics and Research.

With reference to the teaching category, it was found that the most relevant subcategories for university of Colombia were: Communicative competence, authors (Theoretical references about competencies) and approaches for the definition of competencies (Behavioral, functionalist, constructivist and complex (Cinda, 2019). For university of México: Ethics, design, authors and approaches are the most frequent subcategories.

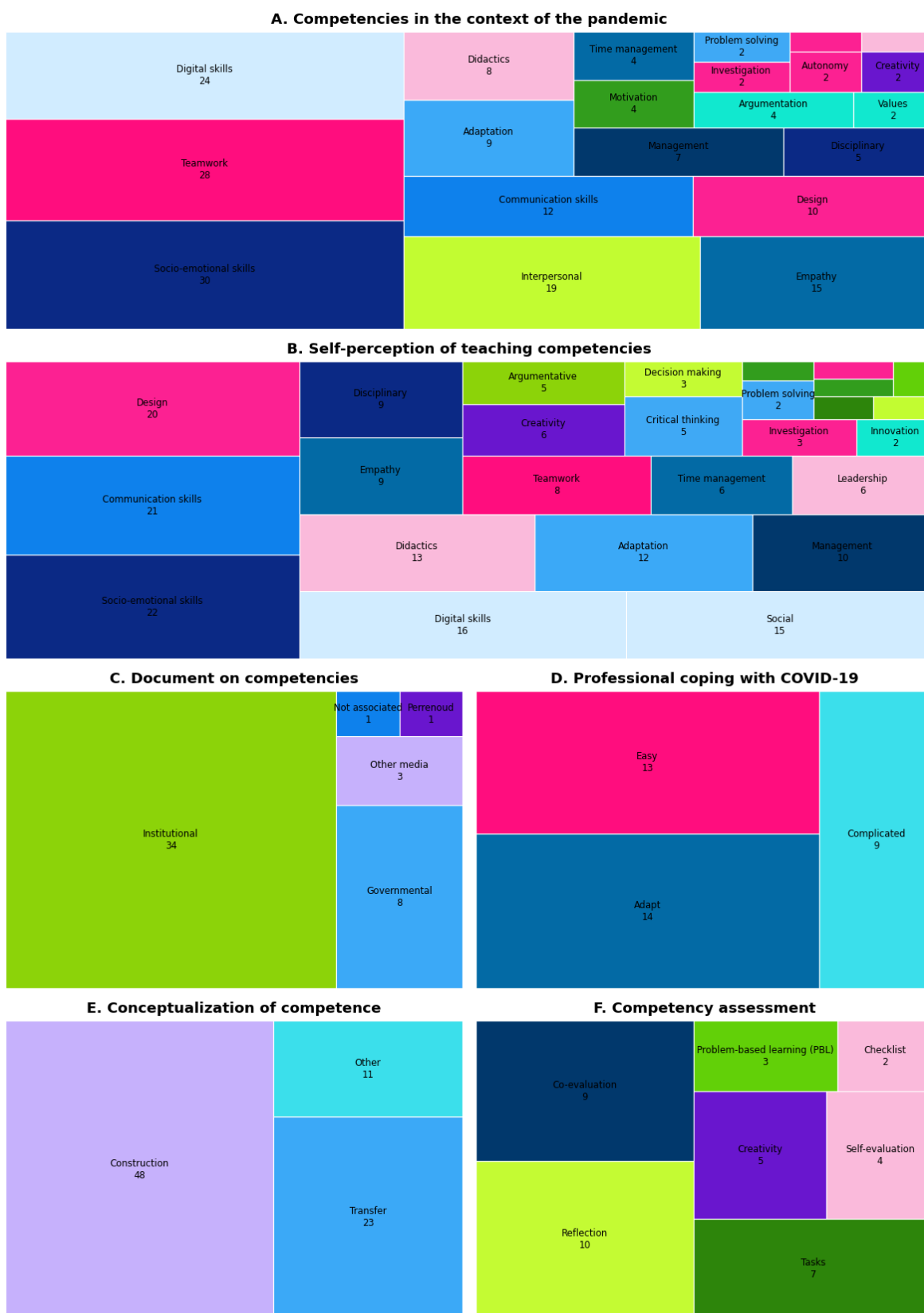
Regarding the competence to evaluate, the subcategories highlighted at university of Colombia corresponded to cultural and contextual competences, metacognitive, teamwork and critical thinking. In alignment with Sierra-Daza, et al. (2023), who emphasized that professional development fundamentally requires working in an interdisciplinary manner and having the ability to communicate effectively with experts from other fields. At university of México, the most reiterative ones corresponded to: Ethics, management and research.

The points of encounter or coincidence between the subcategories of teaching, evaluating and training competencies in Colombia were generated as follows: between teaching and training, research, and between teaching and evaluating, communicative competencies. In the case of university of México, between teaching, evaluating and training, the meeting point was generated with ethics and design; and between training and evaluating, research and innovation were highlighted.

The analysis of the proposed curriculum shows that the teaching competencies that are incorporated into the programs are varied and that, as referred by Bucheli et al. (2016), there may be a pedagogical void when the pedagogical competencies of teaching, evaluating and training are not specified, which leads to the disarticulation of knowledge with the social reality that consequently leads to a lack of motivation in the practice of the curriculum.

Figure 5 shows the product of the codification and hierarchization of the answers to the five central questions of the focus groups in which practicing teachers and teachers in training participated, describing the emerging subcategories of the curricular analysis at the levels of proposed, applied and achieved.

Figure 5. Hierarchical map of responses to questions implemented in focus groups with teachers

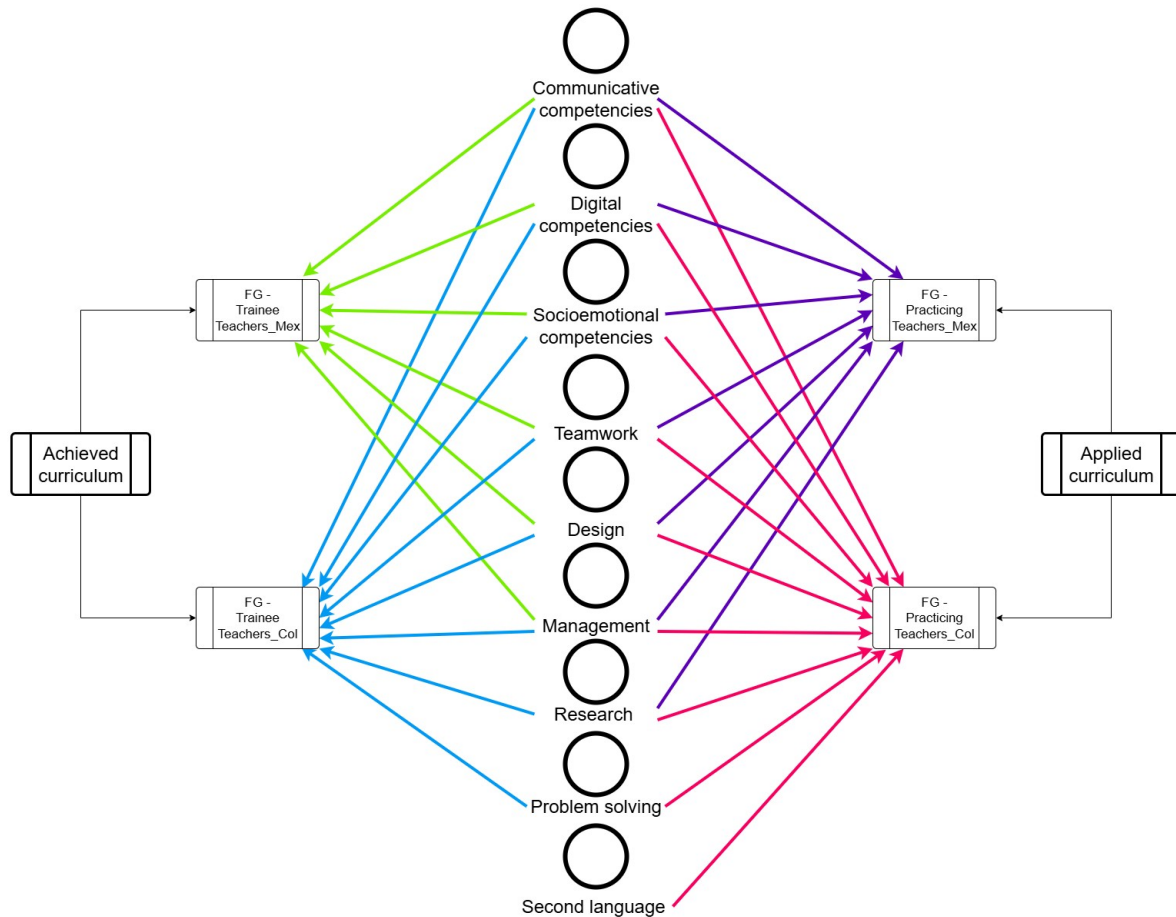


The following aspects were found to be reiterative:

- Facing COVID 19 was achieved with digital competencies, which in some cases had to be strengthened together with the students; having experience in virtual distance modality facilitated pedagogical-didactic practices.
- The concept of competency is associated with skills, abilities and cognitive processes, competencies are built; the competencies that were exacerbated during the pandemic were social, communicative, technological and didactic.
- Colombian and Mexican teachers agreed that having experience or having been trained in virtual distance education facilitated their performance during the pandemic; it was only a process of adaptation in which empathy was fundamental to give continuity to the educational processes.
- The competencies that generally allowed teachers to face the challenges of the pandemic were: technopedagogical competence, affective competence, and empathy.
- Regarding how they propose the competencies, there was no consensus; the following forms were mentioned: Aligned with a problematic core, specific learning objectives and their respective outcome, in guides through criteria, booklets, guiding questions, analysis and integrative projects.
- About the evaluation of competencies, they mentioned that it is carried out through self-evaluation, co-evaluation and tasks.

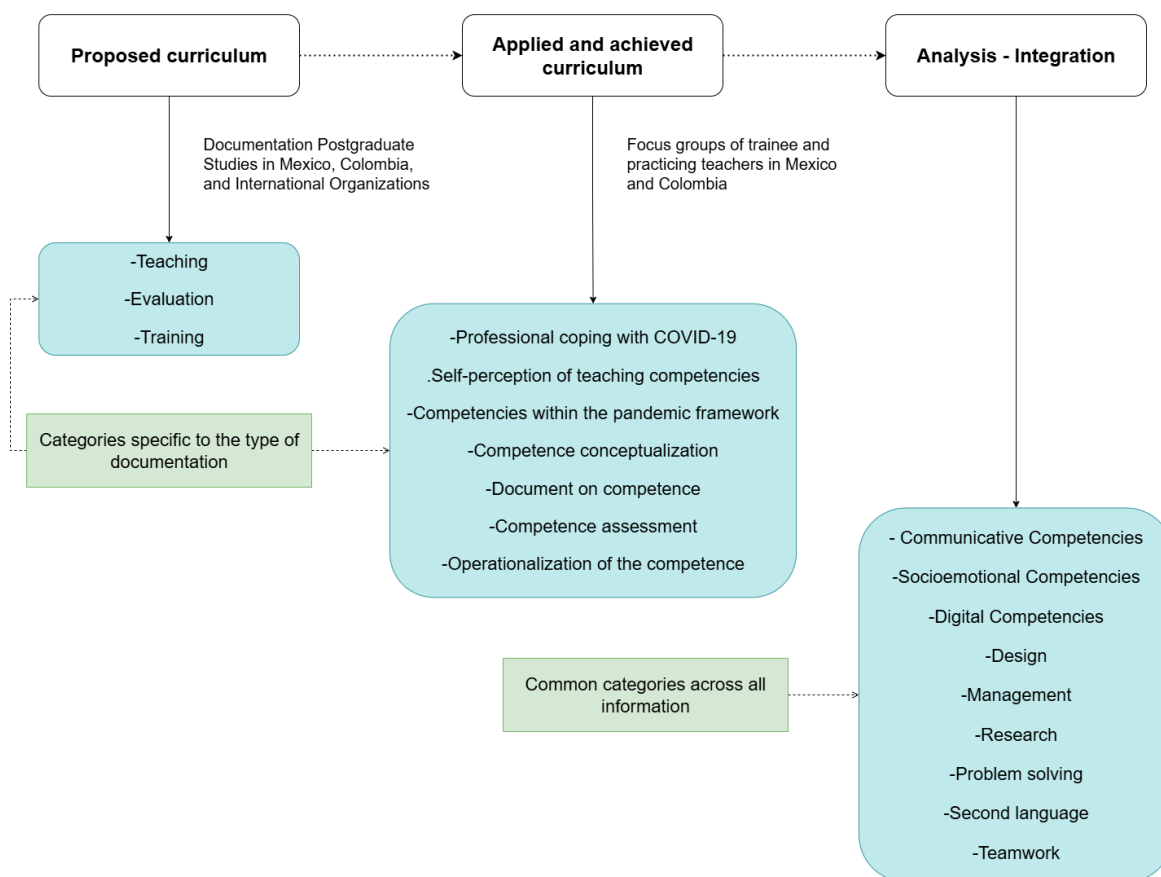
The main teaching competencies declared in the focus groups have been built in the professional teaching practice and are not necessarily those described in the institutional documents; the curriculum should focus on promoting the capacities that emerge to respond to the needs of the professional contexts. The similarities and differences in the competencies declared by University of México and University of Colombia teachers are described in Figure 6.

Figure 6. Teaching competencies required in postgraduate education, indicating similarities and differences



Based on the selective codification, teachers recognize that competencies should be updated in the curriculum, and greater relevance should be given to socioemotional competencies, training, operationalization and evaluation of these. In Figure 7, the results of the three codification processes are synthesized based on grounded theory (Strauss and Corbin 2016).

Figure 7. Synthesis of open, axial, and selective codification in the comparison process



4. DISCUSSION AND CONCLUSIONS

In the research, the curriculum is approached as a guiding guide of the formative processes, it contains the actions, strategies and contents that are part of the undergraduate and postgraduate programs within the educational institutions, in that sense, it is the one that makes explicit the competences that are acquired or strengthened to perform adequately in the context of the exercise of the profession or the postgraduate degree. In the process, coherence was established between the proposed curriculum, understood as the object of teaching according to an academic discipline, the curriculum applied to classroom teaching and the organization of disciplinary contents; defining aspects of human formation and corresponding to the pedagogical-didactic dimension, and the curriculum achieved, which is linked to the evaluative dimension and corresponds to what students are expected to learn,

in coincidence with what is stated by Gamboa et al. (2020) and Vera-Monroy and Gamboa (2022).

The analyses conducted allow us to establish coincidences between the proposed curriculum of the university programs in Colombia and university in Mexico, and the international guidelines of the WB, IDB, ICFES, UNESCO and the UN. In university of Colombia, the emphasis is on training and to a lesser extent on evaluation (with a very low percentage), while in university of México there is greater emphasis on teaching and in similar proportions on evaluating and training. However, the results of the focus groups showed that for Mexican teachers in practice, it is very important to train. Therefore, it is important to work on refining the coherence between the proposed curriculum and the applied curriculum, and in the Colombian case, to strengthen the competence to evaluate.

The COVID-19 pandemic generated unprecedented changes in education, which led to the need for teachers to adjust or acquire new competencies to respond to the challenges that this situation has brought with it. Amid this, distance education has been redefined, recognizing that there are skills that can be worked on without direct contact, involving the student not only with their cognition, but also with their senses and emotions (Mendoza, 2020). Therefore, teachers have had to acquire new skills to use technological tools, design didactic materials in digital format and manage interaction with students through virtual platforms (Gamboa et al., 2022).

The intervention with the teachers confirmed that the skills in the use of technology resulting from the experience previously acquired during their training in the virtual distance mode, allowed them to have the knowledge about digital tools that promote participation and learning to give continuity to the training process; This aligns with the findings of Moreno et al. (2021), who highlighted that the use of technologies, specifically augmented reality, by teachers enhances their digital competence compared to those who have not utilized such tools. Furthermore, it was not only about exacerbating or strengthening digital competencies, but also empathy that is related to socioemotional competencies, which according to UNESCO and the OECD guarantee the educational success of students, since it is related to social skills and emotional intelligence to perform activities with quality and efficiency (Llorent et al., 2020).

With respect to the socioemotional competencies that should be made more explicit in the proposed curriculum for the improvement of teaching skills, it has been demonstrated that training for empathy should be taught in all areas, regardless of the curricular area in which the teacher works, complementing what was stated by Caballero-Cobos and Llorent (2022); Santana-Martel and Pérez (2023), who point out that methodologically, activities of self-regulation and cooperation generate positive emotions, and with it, the development of skills such as empathy.

The reflective exercise of teaching, which as a continuous practice should allow the adaptation to diverse contexts and contingencies to favor the identification and satisfaction of the needs of students and their context, was experienced exponentially during the teaching practices during the health emergency (Soler and Ruano, 2023). A predominant aspect in the

teachers' narratives regarding the changes in practice was the recognition of what was exacerbated during this experience between teachers and students, and it was the interest for the other, the otherness re-signified interpersonal relationships, marked the interest in training in socioemotional competencies. Recognizing that spaces with technological mediation were not only needed to build knowledge of the disciplines, but also to contain the feelings of anxiety and uncertainty that were experienced during this period, and that marked humanity in the face of the fragility of the human species and the need to combine skills to solve problems in certain contexts.

The comparative analysis based on the documentary review and the focus groups allowed exchanges on good practices and identification of areas for improvement in teacher training, it was concluded that ethics, design and research are relevant subcategories in both institutions, suggesting common points in the competencies of teachers in higher education. Coinciding with Vargas (2022), who points out that design as a competence allows consolidating learning environments and strategies to resignify professional practices, articulating metacognitive and methodological aspects, and with Ramos and López (2019), who recognize ethics as a competence required for the consolidation of citizens for the XXI century in line with tolerance, equity and solidarity, qualities that in teacher training and exercise must distinguish them to promote social changes as an end of education. Likewise, research competence is an alternative for the understanding and transfer of values aimed at stimulating the research potential of teachers (Ollarves and Salguero, 2009), fostering the culture of research as stated by Pérez (2012).

The coincidences between the subcategories of competencies to evaluate, teach and train indicate to begin with that communicative competencies are relevant in postgraduate teacher training; they are indispensable in the daily work of teachers in front of school groups of basic education, even so, in the classrooms there are perceived deficiencies in teaching practices, which are transferred to new professionals in training, the deficiencies are marked in oral competencies and mostly in written ones as recognized by Lopez and Medina (2021). Therefore, as an improvement strategy, it is important to incorporate or magnify in teacher training curriculum, the value of the sociocultural dimension in the development of communicative competence and its performance in the school environment, because of its contribution to the transformation of future professionals, in integral subjects as today's society requires them following Perez (2017).

Continuing, innovation emerged in times of pandemic in the classrooms that were configured under the global emergency and was established to stay as an important opportunity for change, being recognized as the ability to systematize transformation alternatives and propose new strategies to raise the quality of the educational process as expressed by Corral et al. (2020). Without these implying large investments of resources, innovation does not necessarily have to refer to disruptive aspects; what is important, as stated by teachers, is to cultivate students' creativity in the classroom and promote creative and design thinking to solve problems.

A great absence in the findings was the emphasis on second language competence and digital competencies that as pointed out Amor and Serrano (2019) are relevant to ensure quality education, so they should be aspects to consider in curricular reforms at the postgraduate level of teachers. Complementing García-Tati and Sánchez-Moreno (2023), propose that educators of future teachers should model various strategies integrating technology to promote cognitive skills, enabling them to adopt and apply these strategies in their teaching and learning processes. Likewise, in the current context, the participation of teachers in internationalization programs is being restricted because teachers are not able to demonstrate a sufficient proficiency in a second language to perform in the institutions with which it is possible to establish exchange agreements.

Problem solving is a competence that is promoted in teacher training programs, through pedagogical practice where teachers, according to the analysis of the context, proceed to the implementation of management in curricular aspects or public policies for the implementation of solutions, analyzing the impact that have the problems to solve, reducing the effects on these, this competence should continue to be promoted in teacher training globally.

Evaluation as a competence in teacher training should be evidenced in the classroom through the implementation of comprehensive processes that include self-evaluation, co-evaluation and hetero evaluation. In order to carry out these activities and in an attempt to foster this skill, the evaluation process can be complemented with the proposed implementation of evaluation rubrics, an initiative that allows reducing subjectivities, as mentioned by Vera-Monroy and Gamboa, (2022); the use of analytical rubrics, make explicit the performance by parts, components or determined topics, being more specific by including indicators of qualities as referred to Jönsson, et al. (2021). Reaffirming the position of Ochoa and Moya (2019) who point out the importance of formative evaluation focused on the continuous monitoring of the educational process, using qualitative methods such as interviews, observations and field diaries to know the student's progress and the summative evaluation focused on measuring the results through objective tests and their statistical analysis. Both forms of evaluation are fundamental to understanding and supporting student learning.

To close, it is also important to point out that, although the competencies are clearly proposed in institutional documents as part of the proposed curriculum, it is essential that teachers, as part of their ongoing training within a postgraduate program, have spaces to reaffirm the learning objectives and the skills required in emerging contexts, in fact, teachers who ensure the articulation between the levels of the curriculum: the pretended, the applied and the achieved (Vera-Monroy and Gamboa, 2022), should be part of the collective and permanent construction of the guidelines for training and as a consequence of this, the agreements should be reflected not only in the master documents but also in syllabus, guides, projects, among others used by teachers to achieve an articulation between the proposed competencies and those outlined in practice that are translated into the applied curriculum, ensuring curricular coherence.

Finally, the continuous training of teachers is essential to ensure that the collective remains updated in the formulation and promotion of competencies through the curriculum, implementing innovations that lead to new pedagogical practices that facilitate the construction of disciplinary knowledge and the promotion of otherness to move from monological to dialogical educational practices based on pedagogical actions that promote the meaningful encounter between the educator and the learner through language and communication as recognized by Vargas-Manrique (2016). This will contribute to the constant improvement of educational quality, training and continuous professional development of teachers that not only benefit educators in their practice, but also directly impact the educational experience of students (Grijalba and Mendoza, 2020).

5. LIMITATIONS AND PROSPECTIVE

The comparative study made it possible to trace a route for the collection of information from primary sources that correspond to the narratives of practicing teachers and teachers in training, together with the institutional documents that for the cases were established as program educational projects, master documents or study plans, which are fundamental for the understanding of the formulation, approach and demonstration of competencies through the proposed, applied and achieved curriculum. It is not always possible to count on the massive and voluntary participation of teachers and sometimes the testimonies are perceived to be more aligned to institutional policies than to the individual constructions that are generated naturally in the teaching practice, which may influence the narratives of the educational actors' own experiences.

A binary comparative study of teaching competencies in postgraduate education in Mexico and Colombia requires knowledge of different curricular proposals to evaluate in depth the situation of the curriculum and its articulation between the proposed levels. Therefore, it is necessary to have the institutional will to recognize the successes and the aspects to be improved.

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