



## **Pedagogical Transformations In Non-Graduate Professionals: The Experience In Pedagogy Courses For Teaching Practice**

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### **Abstract**

This research identifies the pedagogical transformations perceived by non-graduate professionals from developing pedagogy courses for the teaching practice. It corresponds to a quantitative study of the descriptive level framed in the empirical-analytical paradigm and the non-experimental transversal method of a deductive type. The study involved 152 non-graduate professionals who teach in the Faculty of Business Sciences in a higher education institution in Colombia and took no less than 120 hours in pedagogy, which corresponds to a legal requirement to be able to carry out teaching activities. An instrument composed of 33 Likert scale items was applied to the sample participants, which addressed sociodemographic characteristics, pedagogical knowledge, pedagogical practice and integral pedagogical subject. The data collected were processed through descriptive statistical techniques. The study's findings indicate that pedagogical training scenarios for non-graduate professionals, such as short courses of no less than 120 hours -as occurs in the Colombian context- positively impact professionals and their teaching qualifications. It is concluded that from the participants' perceptions, transformations are produced in pedagogical knowledge, practice and the configuration of the integral pedagogical subject.

**Keywords:** perceptions; pedagogical transformation; pedagogical knowledge; pedagogical practice; unlicensed professional.

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### **Resumen**

En esta investigación se identifican las transformaciones pedagógicas percibidas por profesionales no licenciados a partir del desarrollo de cursos de pedagogía para el ejercicio docente. Corresponde a un estudio cuantitativo de nivel descriptivo enmarcado en el paradigma empírico-analítico y el método no experimental transversal de tipo deductivo. Participaron en el estudio

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152 profesionales no licenciados que ejercen la docencia dentro de una Facultad de Ciencias Empresariales en una institución de educación superior en Colombia, los cuales adelantaron un curso no inferior a 120 horas en materia pedagógica y que corresponde a un requisito legal para poder adelantar actividades de docencia. A los participantes de la muestra se les aplicó un instrumento integrado por 33 ítems tipo escala Likert en los que se abordaron las dimensiones características sociodemográficas, saber pedagógico, práctica pedagógica y sujeto pedagógico integral. Los datos recolectados fueron procesados a través de técnicas de estadística descriptiva. Los hallazgos del estudio indican que los escenarios de formación pedagógica para profesionales no licenciados como son los cursos de corta duración no menores a 120 horas -como ocurre en el contexto colombiano-, tienen una incidencia positiva entre los profesionales y su cualificación docente. Se concluye que desde las percepciones de los participantes, se producen transformaciones en el saber pedagógico, la práctica pedagógica y la configuración del sujeto pedagógico integral.

*Palabras clave: percepciones; transformación pedagógica; saber pedagógico; práctica pedagógica; profesional no licenciado.*

## INTRODUCTION

It is common that many professionals, even those who have advanced undergraduate studies in education for the practice of teaching in any field and level of training, fail to identify the ontological, epistemological and conceptual limits of the field of pedagogy. Indeed, it can still be confused with other topics, such as teaching or didactics (Alexander, 2008; Gipps and Murphy, 1996), which, although directly related to pedagogy, correspond to different constructs. However, one thing is clear today: there is a genuine interest in rescuing pedagogy as a fundamental and transcendental element of the teacher's action, trying to confront the technical perspective that has been imposed on teachers, leading them to a kind of pseudo-professionalism (Freire, 2004; Alexander, 2008; Ball, 2003).

Pedagogy can be understood as a discipline that combines two dimensions that articulate and complement each other: pedagogical discursive practice and pedagogical knowledge. As a field of knowledge, pedagogy is in charge of "conceptualizing, applying and experimenting knowledge related to the teaching of specific knowledge in different cultures" (Zuluaga, 1999, p. 11), and for this purpose, pedagogy relies on different methods, tools and devices. On the other hand, when mention is made of pedagogy as a discursive practice, the aim is to make visible the rules or institutions that emerge for a given space and time and that are directly related to knowledge (Zuluaga, 1999; Runge, 2002).

On the other hand, knowledge can be understood as "the broadest and most open space of knowledge, [...] where discourses of very different levels can be located: from those that are just beginning to have objects of discourse and practices to differentiate themselves from other discourses and specify themselves, to those that achieve a systematicity that does not yet obey formal criteria" (Zuluaga, 1999, p. 26). In this sense, knowledge would incorporate both formal and non-formal knowledge, and therefore, depth is required to locate its genesis and emergence from the conditions that materialize and legitimize it. From a functional perspective, Runge (2002) conceptualizes this knowledge as the grouping of thematic objects and knowledge that is conglomerated in discourses.

Now, pedagogical practice designates a category of methodological nature in that it is situated in scenarios of application and reflection -therefore, sociohistorical (Díaz, 2019)- and where pedagogical models -theoretical and practical- that are used to guide and materialize teaching become visible, knowledge from other fields of knowledge that are taken up in pedagogy, ways in which pedagogical discourses function within schools, social processes oriented by functions and roles among different subjects, and teaching practices mediated by general and particular didactics (Wiley and Hilton, 2018; Black and William, 2018; Zuluaga, 1999; Runge, 2002).

On the other hand, pedagogical knowledge corresponds to a whole set of discourses on teaching and education, the knowledge that can be mobilized from distant places and levels but manages to be linked in the reflection on the phenomenon of education and teaching. In this way, pedagogy as knowledge should be understood as a set of knowledge that is legitimate for a given time -therefore, current-related to different

spheres associated with the phenomenon of education such as teaching, learning, training, instruction, didactics, among others (Skidmore, 2006; Zuluaga, 1999; Runge et al., 2018; Runge and Muñoz, 2012).

It is imperative to recognize that this pedagogical knowledge is not only configured and molded within the framework of the discursive practice of teachers but also feeds back to other disciplinary and scientific fields, such as psychology, cognition, neuroscience, and sociology, among others. Therefore, pedagogy is an epistemological field of transdisciplinary nature due to the plurality of discourses and practices it brings together, the possibility of interpreting concepts and perspectives, and empowering new knowledge and practices that lead to the variation of worldviews (Díaz, 2019). In this way, the discourses and practices that configure pedagogy are constantly being transformed by internal elements of the field of knowledge and by the dynamics that emerge in the context of schools, communities and territories.

The disciplinary field of pedagogy can be traced, analyzed, reflected upon and interpreted in the educational processes and their contexts with their meanings and senses, and at the same time, in the pedagogical, discursive and social practices. However, the central core that connects all areas of knowledge is the integral formation of the human being: “formation is the essential project of pedagogy. This essence of pedagogy must be reflected upon as a constitutive part of the historical horizon that engages pedagogy in its clarification and realization” (Vargas, 2008, p.113).

The question about the formation of the human being, an issue that is a fundamental part of pedagogy, leads to the particular and deep recognition of those phenomena that are of interest in this field, for example, globalization, virtuality, the interconnected landscape, interculturality, critical thinking, among others (Teo, 2019; Beetham and Sharpe, 2019; Kali et al., 2019). As an example of how the dynamics of the lifeworld shape pedagogy, some research works can be pointed out in which it is sought to rethink such category in pandemic and post-pandemic period as a way to strengthen education and its practices (Ladson-Billings, 2021; Greenhow, Lewin and Staudt, 2021; Schwartzman, 2020; Oyedotun, 2020).

From the pedagogical component -a complex and transdisciplinary structure of knowledge and both formal and informal practices on education- and from bases that cross the ethical, political and ideological dimension (Freire, 2004), the teacher: 1) identifies and reflects on the learning processes advanced by the subjects, 2) rethinks from theory and experience the teaching practices, 3) questions the role of the teacher and the student in sociohistorical context, 4) explores in detail the dynamics of reality with its problems at different levels, and 5) generates knowledge for pedagogical reconfiguration (Avendaño et al., 2022; Wilson et al., 2019; Arnold and Mundy, 2020; Santos and Soler, 2021). All of the above from bases cross teachers' ethical, political and ideological dimensions of teachers (Freire, 2004).

These theoretical and conceptual elements on pedagogy are not gratuitous. They are the result of research, scientific work and critical reflections located in a broad trajectory in the historical context. This assumes that the person or professional who teaches requires the development of a pedagogical dimension as part of his or her professional spectrum that allows the materialization of the educational activities in the school or university and, at the same time, capacities for the strengthening of a praxis that allows the understanding and reflection of the elements that condition and stress education.

However, this is still an ideal waiting to be perfected, especially when public educational policies ignore the relevance and transcendence of the pedagogical dimension. In Colombia, to give an example that illustrates the situation, professionals who have not completed a degree in education or pedagogy can teach without the need to take a postgraduate course or training program in this field. The legislation admits the development of a course or diploma in pedagogy with a minimum duration of 120 hours, a type of education categorized as informal since Law 115 of 1994 or General Education Law. In the case of teachers for formal education -preschool, primary, secondary and middle school- national regulations require a course or diploma of 480 hours.

The interest of this research is located in this particular socio-educational phenomenon, which has led researchers to wonder about the impact or incidence of this type of diploma courses or courses in the configuration and transformation of the pedagogical dimension of non-graduate professionals. Therefore, the objective of this study was to identify the pedagogical transformations perceived by non-graduate professionals as a result of the development of pedagogy courses for the teaching practice based on the case of a group of professors assigned to a Faculty of Business Sciences of a public university in Colombia.

## METHODS AND MATERIALS

It corresponds to a quantitative study of the descriptive level framed in the empirical-analytical paradigm and the non-experimental transversal method of a deductive type. The study involved 152 non-graduate professionals who teach in the Faculty of Business Sciences in a higher education institution in Colombia who took no less than 120 hours in pedagogy, which corresponds to a legal requirement to be able to carry out teaching activities. In order to identify the sample of the study, a statistical formula was applied to take as a reference a population of 235 university professors who had less than two years of experience within the university for the selected faculty:

$$n = \frac{Zc^2 \times P \times Q \times E^2 \times (N-1) + Zc^2 \times P \times Q}{E^2} \quad (1)$$

Where:  $Zc = 95\%$  or 1.96 is the level of certainty, under the normal curve;  $P = 0.5$  is the probability of success;  $Q = 0.5$  is the probability of failure;  $E = 5\%$ -0.05 is the level of error; and  $N = 235$  is the population.

An instrument composed of 33 Likert-scale type items was applied to the participants of the sample, addressing the following dimensions: sociodemographic characteristics, pedagogical knowledge, practice and integral pedagogical subject. For the first dimension, information was collected about age, sex, highest education, work sector, undergraduate education and reasons for pursuing a diploma in pedagogy. For the other dimensions, the aspects summarized in Table 1 were taken into account:

Table 1: Variables, dimensions and research indicators

<i>Variable</i>	<i>Dimension</i>	<i>Indicators</i>
Changes in perceptions about pedagogy	Pedagogical knowledge	1. Learning (items 1, 2) 2. Teaching (items 3, 4) 3. Didactics (items 5, 6) 4. Curriculum (items 7, 8) 5. Learning assessment (items 9, 10) 6. Praxis - Reflected experience (items 11) 7. Integral subject to be trained (items 12) 8. Teaching subject - functions (items 13)
	Pedagogical practice	9. Pedagogical approaches (items 14) 10. Teaching planning (items 15) 11. Teaching strategies (items 16, 17) 12. ICT-supported strategies (items 18) 13. Didactic strategies (items 19) 14. Evaluation strategies (items 20) 15. Research (items 21)
	Integral pedagogical subject	16. Teacher - Political subject (items 22) 17. Teacher - Social subject (items 23) 18. Teacher - Ethical subject (items 24) 19. Teacher - Professional subject of dignity (items 25) 20. Teacher - Subject in context and community (items 26)

The items for the dimensions in Table 1 were formulated as statements with four response options: strongly agree, somewhat agree, somewhat disagree and strongly disagree. First, the instrument was validated through the judgment of experts, who reviewed each of the items under the criteria of clarity, neutrality, relevance and coherence. Next, the instrument was administered through the Google Forms application. Finally, the data collected were processed through descriptive statistical techniques.

## RESULTS

*Sociodemographic characteristics.* Regarding sex, 57.9% of the participants were men and 42.1% were women. Of the total sample, the majority were 46 years of age or older (55.3%), while the rest of the teachers were in the following age ranges: 26 and 31 years (15.8%), 32 and 40 years (23.7%). According to the highest educational background, most teachers had master's and specialist degrees at the time of the study (73.7% and 21.1%, respectively), and only 5.3% had obtained their doctoral degrees. Furthermore, the professional/undergraduate education of the teachers was oriented to the broad field of business sciences: financial administration (24.3%), professional in foreign trade (22.4%), public accounting (19.1%), business administration (15.8%), industrial engineering (4.6%) and bachelor's degree in commerce (3.9%).

68.4% of the participants indicated that they had a professional activity in addition to teaching: public accounting (21.1%), employment in the public sector (19.1%), business consulting (9.9%), employment in the private sector (8.5%), auditing (7.2%) and contractor (2.6%). Finally, the reasons expressed by teachers for pursuing a diploma in pedagogy are: to consolidate knowledge (41.4%), to update teaching methodologies (38.8%) and to acquire pedagogical skills (19.7%).

*Pedagogical knowledge dimension.* For the analysis of this dimension, aspects such as learning, teaching, didactics, curriculum, learning assessment, pedagogical praxis, integral subject of training and teaching subject to be trained were addressed, as shown in Table 2. Furthermore, the items were formulated in such a way as to identify whether there had been a pedagogical transformation for knowledge in each of these components, understanding transformation as a conscious, critical and voluntary change resulting from the development of courses or diploma courses in pedagogy.

According to the findings, the participants indicate that there were transformations regarding their conception of the nature of learning and the procedures for its achievement (73.7% strongly agree), as well as the appreciations of what learning is and the implications at the level of processes (76.3% strongly agree). Likewise, in the conceptions related to the nature of the teaching phenomenon and its processes for its achievement (65.8% strongly agree) and the implications that teaching processes have in practice (71.1% strongly agree). Similar results were observed regarding the didactic aspect: 76.3% of the participants indicated transformations in their conceptions and 78.9% indicated significant changes with respect to the importance and usefulness given to the means and resources that support teaching.

Concerning the curriculum, positive transformations of a pedagogical nature were also observed: the participants expressed that there were changes in their conceptions of the curriculum as a space for reflection that organizes academic and school life (78.9% strongly agree), as well as its importance and transcendence for the enhancement of the learning of the subjects (76.3% strongly agree). Regarding the learning assessment component, similar results are observed: the participants consider that their conceptions of assessment as a permanent, dialogic, collective and consensual process -beyond grading- were modified (76.3% strongly agree), and the importance of the different types of assessment to favor training and teaching practices (68.4% strongly agree).

Finally, transformations are also observed in most of the professionals consulted regarding their perceptions related to: 1) individual and collective reflection on teaching practice that facilitates dialogue and internalization of doubts, successes and possibilities in this field (71.1% strongly agree), and 2) the subjects that are formed are characterized by their integrality and multidimensionality (68.4%). The item with the lowest percentage corresponds to teachers' perception of their functions, professional character and sociocultural role in context (60.5% strongly agree).

Table 2: Results of the pedagogical knowledge dimension

<i>Item</i>	<i>Options</i>	<i>N°</i>	<i>%</i>
1. My conception about the nature of people's learning and the procedures for its achievement was transformed due to the course or diploma in pedagogy that I took.	a. Strongly agree	112	73.7%
	b. Somewhat agree	32	21.1%
	c. Somewhat disagree	8	5.3%
	d. Strongly Disagree	0	0
2. My perceptions of what learning is and what it implies for a person were transformed due to the pedagogy course or diploma I took.	a. Strongly agree	116	76.3%
	b. Somewhat agree	28	18.4%
	c. Somewhat disagree	8	5.3%
	d. Strongly Disagree	0	0
3. My conception of the nature of teaching people and the procedures for its achievement was transformed due to the pedagogy course I took.	a. Strongly agree	100	65.8%
	b. Somewhat agree	48	31.6%
	c. Somewhat disagree	4	2.6%
	d. Strongly Disagree	0	0
4. My perceptions of what it is and what it implies to teach a person were transformed due to the course or diploma in pedagogy that I took.	a. Strongly agree	108	71.1%
	b. Somewhat agree	40	26.3%
	c. Somewhat disagree	4	2.6%
	d. Strongly Disagree	0	0
5. My conception of didactics was transformed due to the pedagogy course I took.	a. Strongly agree	116	76.3%
	b. Somewhat agree	32	21.1%
	c. Somewhat disagree	4	2.6%
	d. Strongly Disagree	0	0
6. My perception of the importance and usefulness of the means and resources used in teaching to promote learning according to each field of knowledge was transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	120	78.9%
	b. Somewhat agree	28	18.4%
	c. Somewhat disagree	4	2.6%
	d. Strongly Disagree	0	0
7. My conception of the curriculum as a space for reflection that organizes academic and school life was transformed due to the pedagogy course I took.	a. Strongly agree	120	78.9%
	b. Somewhat agree	24	15.8%
	c. Somewhat disagree	7	4.6%
	d. Strongly Disagree	1	0.7%
8. My perception about the importance and usefulness of the curriculum to favor the learning of the subjects and the improvement of teaching practices was transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	116	76.3%
	b. Somewhat agree	28	18.4%
	c. Somewhat disagree	7	4.6%
	d. Strongly Disagree	1	0.7%
9. My conception of learning evaluation as a permanent, dialogic, collective and consensual process -beyond grading- was transformed due to the pedagogy course or diploma course I took.	a. Strongly agree	116	76.3%
	b. Somewhat agree	32	21.1%
	c. Somewhat disagree	4	2.6%
	d. Strongly Disagree	0	0

10. My perception of the importance and usefulness of the different types of learning assessment to favor the integral formation of the subjects and the improvement of teaching practices was transformed as a result of the pedagogy course or diploma course I took.	a. Strongly agree	104	68.4%
	b. Somewhat agree	44	28.9%
	c. Somewhat disagree	4	2.6%
	d. Strongly Disagree	0	0
11. My perception of the relevance of individual and collective reflection on teaching practice as a space to identify doubts, successes and possibilities for pedagogical evolution was transformed due to the pedagogy course I took.	a. Strongly agree	108	71.1%
	b. Somewhat agree	40	26.3%
	c. Somewhat disagree	4	2.6%
	d. Strongly Disagree	0	0
12. My perception of the subject that is formed from education towards critical human integrity in the cognitive, social, political, citizen, ethical, moral, physical, biological, emotional and environmental dimensions, was transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	104	68.4%
	b. Somewhat agree	32	21.1%
	c. Somewhat disagree	12	7.9%
	d. Strongly Disagree	4	2.6%
13. My perception of teachers and their functions towards teaching with professionalism beyond the presentation of disciplinary topics, the development of research, permanent updating and the pursuit of social changes inside and outside the classroom was transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	92	60.5%
	b. Somewhat agree	56	36.8%
	c. Somewhat disagree	4	2.6%
	d. Strongly Disagree	0	0

*Pedagogical practice dimension.* Table 3 shows the results of the pedagogical practice dimension that links the aspects of pedagogical approaches, teacher planning and teaching strategies, learning assessment, research and didactics with and without ICT support. For the teachers participating in the research, there were transformations in teaching practice when applying pedagogical approaches such as constructivism, meaningful learning, multiple intelligences, and sociocultural or psychogenetic theory of learning, among others (68.4% strongly agree), as well as in the exercise of building curricular planning in a systematized, organized and intentional way, addressing central elements such as competencies, learning outcomes, performance indicators, objectives, among others (64.5% strongly agree).

It seems that the teaching strategies put into practice correspond to the element of greatest transformation: for most of the participants, there were transformations in this scenario, facilitating the design and development of strategies that went beyond the figure of the master class to individual, collective and collaborative work (71.7% strongly agree). Regarding teaching strategies, 60.5% of the teachers indicated that since the diploma in pedagogy training, they had improved their practices by incorporating exercises associated with reading and writing of verbal and non-verbal texts and developing logical thinking.

The majority of teachers also indicated that there were positive transformations in pedagogical practice in terms of 1) the incorporation and use of information and communication technologies as a device to improve students' motivation for learning (63.2% strongly agreed); 2) the design, organization and application of educational materials and resources for training (61.2% strongly agreed); 3) learning evaluation strategies and the use of different instruments for assessment and follow-up (68.4% strongly agreed), and 4) the development of educational research exercises based on the methods used (68.4% strongly agreed). 2% strongly agree, 3) learning evaluation strategies and the use of different instruments for assessment and follow-up (68.4% strongly agree); and 4) the development of educational research exercises based on methods that are specific to education, such as action research, participatory action research and educational action research (57.9%).

Table 3: Results of the pedagogical practice dimension

<i>Item</i>	<i>Options</i>	<i>No</i>	<i>%</i>
14. In my teaching practice, my knowledge about pedagogical approaches such as constructivism, meaningful learning, multiple intelligences, sociocultural or psychogenetic theory of learning, among others, and that allow explaining human development in people and their learning processes, were transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	104	68.4%
	b. Somewhat agree	40	26.3%
	c. Somewhat disagree	8	5.3%
	d. Strongly Disagree	0	0
15. In my teaching practice, my curricular planning as a systematized, organized and intentional process shaped by a particular language that incorporates terms such as competencies, learning outcomes, performance indicators, problem situations, teaching objectives, curriculum, among others, were transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	98	64.5%
	b. Somewhat agree	47	30.9%
	c. Somewhat disagree	7	4.6%
	d. Strongly Disagree	0	0
16. In my teaching practice, my teaching strategies, which should be manifested in organized procedures with varied and diversified tasks that go beyond the master class, to be located in individual, collective and collaborative work, were transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	109	71.7%
	b. Somewhat agree	43	28.3%
	c. Somewhat disagree	0	0
	d. Strongly Disagree	0	0
17. In my teaching practice, my teaching strategies, which should incorporate tasks for developing critical reading and writing of verbal and non-verbal texts, and logic, were transformed due to the pedagogy course or diploma I took.	a. Strongly agree	92	60.5%
	b. Somewhat agree	52	34.2%
	c. Somewhat disagree	8	5.3%
	d. Strongly Disagree	0	0
18. In my teaching practice, my teaching strategies, which should incorporate information and communication technologies to motivate the formative work of students, were transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	96	63.2%
	b. Somewhat agree	56	36.8%
	c. Somewhat disagree	0	0
	d. Strongly Disagree	0	0
19. In my teaching practice, my planning of educational materials and resources for training, which involves the design, organization and coherent application of the same in coherence with the learning objectives, were transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	93	61.2%
	b. Somewhat agree	59	38.8%
	c. Somewhat disagree	0	0
	d. Strongly Disagree	0	0
20. In my teaching practice, my learning evaluation processes as collective and consensual practices that deserve a deep reflection to account for the skills and abilities developed through different means, instruments and strategies, were transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	104	68.4%
	b. Somewhat agree	39	25.7%
	c. Somewhat disagree	0	0
	d. Strongly Disagree	9	5.9%
21. In my teaching practice, my research exercises in the classroom through action research (AI), participatory action research (PAR) and educational action research (EAR), to promote changes and improvements in different aspects of school life, were transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	88	57.9%
	b. Somewhat agree	56	36.8%
	c. Somewhat disagree	4	2.6%
	d. Strongly Disagree	4	2.6%

*Integral pedagogical subject dimension.* Table 4 reflects the results obtained regarding the integral pedagogical subject dimension, which gathered aspects such as political, social, ethical, professional with dignity and community in context. For most of the participants, there were visible transformations due to the



diploma in pedagogy in each of these aspects. Indeed, they consider that their perceptions were modified in terms of the idea of the teacher as a political subject who promotes spaces for the mobilization and collective action of individuals and their communities (60.5% strongly agree) or the figure of the teacher as a social subject who constantly generates dialogue processes for human development and the strengthening of solidarity and ties between people (68.4% strongly agree).

In addition, the results show significant changes in perceptions of the teacher as an ethical subject that leads to the figure of the teacher who carries out his or her functions with full respect, honesty and rectitude within a framework of plurality and human diversity (64.9% strongly agree), as well as the image of the teacher as a professional who deserves dignity, identity and recognition for his or her work (67.1% strongly agree), as well as the image of the teacher as a professional who deserves dignity, identity and recognition for his work (67.1% strongly agree) and a contextualized subject which is given to the development of his functions with recognition of the particularities of the contexts because only from there can one educate in an integral sense (67.1% strongly agree).

Table 4: Results of the integral pedagogical subject dimension

<i>Item</i>	<i>Options</i>	<i>No</i>	<i>%</i>
22. My perception of the teacher as a political subject that promotes training spaces for the mobilization and collective action of individuals and communities concerning their problems and needs, was transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	92	60.5%
	b. Somewhat agree	44	28.9%
	c. Somewhat disagree	12	7.9%
	d. Strongly Disagree	4	2.6%
23. My perception of the teacher as a social subject who is given to permanent dialogue with the actors and communities with a humanistic and solidary sense was transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	104	68.4%
	b. Somewhat agree	40	26.3%
	c. Somewhat disagree	8	5.3%
	d. Strongly Disagree	0	0
24. My perception of the teacher as an ethical subject who is given to the development of his functions with strong commitment and values of rectitude, honesty and full respect for differences was transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	96	64.9%
	b. Somewhat agree	45	30.4%
	c. Somewhat disagree	6	4.1%
	d. Strongly Disagree	1	0.7%
25. My perception of the teacher as a worthy professional subject who is given to protecting his place in the communities and society because he is a key actor of human development in the territories was transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	102	67.1%
	b. Somewhat agree	38	25.0%
	c. Somewhat disagree	12	7.9%
	d. Strongly Disagree	0	0
26. My perception of the teacher as a contextualized subject who is given to the development of his functions with recognition of the particularities of the contexts because only from there is it possible to educate in an integral sense was transformed as a result of the course or diploma in pedagogy that I took.	a. Strongly agree	102	67.1%
	b. Somewhat agree	42	27.6%
	c. Somewhat disagree	7	4.6%
	d. Strongly Disagree	1	0.7%

## DISCUSSION

The study was based on the premise that courses or diplomas in pedagogy, which are a legal requirement for non-graduate professionals to accredit their ability to teach at the higher education level, were insufficient considering the complexity, transdisciplinarity and systemic nature of pedagogy as knowledge and practice enjoyed by teachers. However, the research findings show that from the participants' perceptions, pedagogical transformations were homogeneous for most of the cases included in the sample. In other words, it is evident that the pedagogical training scenarios for non-graduate professionals, such as short courses of no less than

120 hours -as occurs in the Colombian context- have a positive impact on professionals. These changes may be due, on the one hand, to the experience that every person has in the educational scenario during the years of training as a student, and on the other hand, to the professional teaching experience that they advance no matter how short it is (Rodríguez et al., 2021; Durán et al., 2014; Rodríguez and Hinojo, 2017; Avendaño et al., 2022).

Another aspect of being emphasized is a direct relationship or a binding connection between pedagogical knowledge and practice: both should be considered as faces of the same coin that complement each other and achieve the unity - the integral whole - of the pedagogy phenomenon. Indeed, the research results show that when pedagogical knowledge transformations occur, critical, conscious and reflective changes also occur in pedagogical practice. Therefore, both are interdependently articulated and shaped (Rodríguez et al., 2021; Durán et al., 2014).

However, it should be noted that the study's findings do not provide solid evidence on the types of pedagogical knowledge and pedagogical practices achieved with the development of short-term courses or diplomas in pedagogy. This point should be taken up in subsequent inquiries to improve pedagogical training programs (Rodríguez and Hinojo, 2017). Despite this, the high percentages against the options' *strongly agree* and *somewhat agree* in each of the items suggest that there are positive advances. Indeed, and it should be recognized that pedagogical knowledge corresponds to a set of propositions, descriptions, concepts and theories that materialize practices, and indeed, there is a direct and intimate relationship between knowledge and practice (Black and William, 2018; Zuluaga, 1999; Runge, 2002). Therefore, as the pedagogical practice is presented, pedagogical knowledge is molded and reconfigured, but at the same time, such transformed knowledge generates changes in the teacher's practice.

## CONCLUSIONS

The findings of the study lead to the conclusion that pedagogy training programs - short pedagogy courses or diploma courses - for non-graduate professionals promote positive pedagogical transformations among those who take them. Moreover, from the participants' perceptions in these diploma courses, transformations are produced in pedagogical knowledge, practice and the configuration of the integral pedagogical subject, favoring teacher qualification. Even so, a permanent assessment of this type of training is required, considering the transcendence and importance of the pedagogical dimension of the teacher in the integral formation of human beings, regardless of the professional program in which he/she is enrolled.

## REFERENCES

- Alexander, R., *Essays on pedagogy*, 1a ed., Routledge, ISBN 9780203609309, Londres, Reino Unido (2008)
- Arnold, J., y Mundy, B., *Praxis pedagogy in teacher education*, <https://doi.org/10.1186/s40561-020-0116-z>, Smart Learn. Environ., 7, 8 (2020)
- Avendaño, W., Rueda, G., y Parada-Trujillo, A., *Perceptions of university teachers on their human, professional, and pedagogical dimensions*, *Journal of Positive Psychology & Wellbeing*, ISSN: 2587-0130, 6(1), 3881-3896 (2022)
- Ball, S., *Profesionalismo, gerencialismo y performatividad*, *Revista Educación y Pedagogía*, ISSN: 0121-7593, 15(37), 85-105 (2003)
- Beetham, H., y Sharpe, R., *Rethinking pedagogy for a digital age: Principles and practices of design*, 3a ed., Routledge, ISBN 978-0-815-36925-7, New York, EEUU (2019)
- Black, P., y William, D., *Classroom assessment and pedagogy*, <https://doi.org/10.1080/0969594X.2018.1441807>, *Assessment in Education: Principles, Policy & Practice*, 25(6), 551-575 (2018)
- Durán, F.Á., Acosta, D.G., y Espinel, Ó.A., *Experiencia docente de profesionales no licenciados en la escuela pública del Distrito*, <https://doi.org/10.19052/ap.2722>, *Actualidades Pedagógicas*, 63, 39-60 (2014)
- Freire, P., *Pedagogy of indignation*, 1a ed., Routledge, ISBN 9781315632902, New York, EEUU (2004)

- Gipps, C.V., y Murphy, P., *Equity in the classroom. Towards effective pedagogy for girls and boys*, 1a ed., Routledge, ISBN 9780203209714, Londres, Reino Unido (1996)
- Díaz, M., ¿Qué es eso que se llama pedagogía? *Pedagogía y Saberes*, ISSN: 0121-2494, (50), 11-28 (2019)
- Greenhow, C., Lewin, C., y Staudt, K., The educational response to Covid-19 across two countries: a critical examination of initial digital pedagogy adoption, <https://doi.org/10.1080/1475939X.2020.1866654>, *Technology, Pedagogy and Education*, 30(1), 7-25 (2021)
- Kali, Y., Sagy, O., Benichou, M., Atias, O., y Levin-Peled, R., Teaching expertise reconsidered: The Technology, Pedagogy, Content and Space (TPeCS) knowledge framework, <https://doi.org/10.1111/bjet.12847>, *British Journal of Educational Technology*, 50(5), 2162-2177 (2019)
- Ladson-Billings, G., I'm Here for the Hard Re-Set: Post Pandemic Pedagogy to Preserve Our Culture, <https://doi.org/10.1080/10665684.2020.1863883>, *Equity & Excellence in Education*, 54(1), 68-78 (2021)
- Oyedotun, T., Sudden change of pedagogy in education driven by COVID-19: Perspectives and evaluation from a developing country, <https://doi.org/10.1016/j.resglo.2020.100029>, *Research in Globalization*, 2, 100029 (2020)
- Rodríguez, J.A., Guerrero, R.S., Varon, V., y Baron, B., Transformaciones de las prácticas pedagógicas de los profesionales no licenciados, <https://doi.org/10.46498/reduipb.v25i1.1458>, *Revista Educare*, 25(1), 174–200 (2021)
- Rodríguez, M.V., y Hinojo, F.J., Incidencia de los Programas de Formación Pedagógica en el Perfil de los Profesionales No Licenciados en la Facultad de Educación de UNIMINUTO, <https://doi.org/10.4067/s0718-50062017000500003>, *Formación universitaria*, 10(5), 17-28 (2017)
- Runge, A., Una epistemología histórica de la pedagogía: El trabajo de Olga Lucía Zuluaga, *Revista de Pedagogía*, ISSN: 0798-9792, 23(68), 361-385 (2002)
- Runge, A., Hincapié, A., Muñoz, D., y Ospina, C., *El campo disciplinar y profesional de la pedagogía en Colombia*, 21a ed., Fondo Editorial Universidad Católica de Oriente, ISBN 978-958-5518-44-5, Rionegro, Colombia (2018)
- Runge, A., y Muñoz, D., Pedagogía y praxis (práctica) educativa o educación. De nuevo: una diferencia necesaria, *Revista Latinoamericana de Estudios Educativos*, ISSN: 1900-9895, 8(2), 75-96 (2012)
- Santos, D., y Soler, S., Pedagogical practice as 'feeling-thinking' praxis in higher education: a case study in Colombia, <https://doi.org/10.1080/13562517.2021.1885021>, *Teaching in Higher Education*, 26(3), 1-15 (2021)
- Schwartzman, R., Performing pandemic pedagogy, <https://doi.org/10.1080/03634523.2020.1804602>, *Communication Education*, 69(4), 502-517 (2020)
- Skidmore, D., Pedagogy and dialogue, <https://doi.org/10.1080/03057640601048407>, *Cambridge Journal of Education*, 36(4), 503-514 (2006)
- Teo, P., Teaching for the 21st century: A case for dialogic pedagogy, <https://doi.org/10.1016/j.lcsi.2019.03.009>, *Learning, Culture and Social Interaction*, 21, 170-178 (2019)
- Vargas, G., *La humanización como formación*, 1a ed., Editorial San Pablo, ISBN 958-692-175, Bogotá, Colombia (2008)
- Wiley, D., & Hilton III, J., Defining OER-Enabled Pedagogy, <https://doi.org/10.19173/irrodl.v19i4.3601>, *The International Review of Research in Open and Distributed Learning*, 19(4), 133-146 (2018)
- Wilson, C.M., Hanna, M.O., y Li, M., Imagining and enacting liberatory pedagogical praxis in a politically divisive era, <https://doi.org/10.1080/10665684.2019.1656563>, *Equity & Excellence in Education*, 52(2-3), 343-363 (2019)
- Zuluaga, O.L., *Pedagogía e historia. La historicidad de la pedagogía, la enseñanza, un objeto de saber*, 1a ed., Siglo del Hombre Editores - Anthropos - Editorial Universidad de Antioquia, ISBN 958-665-017-0, Bogotá, Colombia (1999)