Formative Meaning Of Teaching Practice

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Abstract

The perception that four teachers and one hundred students have of their teaching practices with theoretical support was explored, which served as a basis for discussion, of the incidence of teacher training on the educational task, from a qualitative research, inductive method, descriptive-interpretative approach. To address subjective aspects about before, during and after the practice, a non-participant observation guide and a student questionnaire were used as instruments. The results allowed recovering the contributions in two constructs: the theoretical meaning and the formative meaning. Here we present the analysis of the formative meaning that contemplates the subcategories of New Forms of Pedagogical Relationship (NFRP) articulated to critical dialogicity and Collaborative Work (CT) and derived from it, the importance of enhancing the formative nature of research.

Keywords: collaborative work, teaching practice, teacher training, formative meaning, observation

Introduction

In recent decades, Higher Education Institutions (HEIs), in their substantive functions framed from teaching, research, tutoring and management, have put great interest in qualifying teachers, so that they acquire the necessary skills to perform their teaching work (Ramírez et al., 2020; Gamboa, 2016). It is for this reason that university teachers carry out their work, which is essential for their professional and intellectual development, in a variety of scenarios and resources for their teacher training. Therefore, the exercise of practice, when reflected upon, will make it possible to discover new meanings, methodologies and contributions from others, which will help them to improve their work (Gamboa et al., 2021; Reyes et al., Ermeling et al., 2015). Authors such as Vergara (2005) and Estévez (2014) express that, although there has been research on teacher training, the studies (Encinas & Mercado, 2012; Vergara, 2005) show that it should be expanded, given that many of them are framed at the basic level of teaching. With this premise in mind, the perceptions of the formative meaning of teaching practice in the Bachelor's Degree in Education were investigated (Avendaño et al., 2021; Hernández et al., 2021, Gómez, 2020). Consequently, the only intention was to provide some theoretically based assessments of the formative meaning of teaching practice, to serve as a basis for discussion of the impact of teacher training on the educational task. Any practical intervention must be accompanied by a reflection on it, as well as by a theoretical enrichment and a rethinking of the role of those involved in it. Thus, Stenhouse (1984) states:

What is desirable in educational innovation is not that we perfect our tactics to advance our cause, but that we improve our ability to critique our practice in the light of our beliefs and our beliefs in the light of our practice. (p. 285)

This article was the result of the doctoral academic stay with thesis entitled La práctica pedagógica de los docentes formadores de docentes de la Facultad de Educación, Universidad Santiago de Cali, carried out in the Facultad de Filosofía y Letras de la Universidad Autónoma Nuevo León/ UANL, Mexico during the period from August to November 2019, approved by commission of studies by the Universidad Santiago de Cali, Colombia. In turn, this research result was articulated with the follow-up project entitled Strengthening scientific skills for trainee teachers in the area of natural sciences through laboratory practices adapted to the classroom and whose code of registration with the Directorate General of Research (DGI) of the University Santiago de Cali, Colombia was DGI-COCEIN-N° 313-621118-254.

Theoretical underpinning

Exploring the literature, we find different definitions and positions on the concept of teaching practice addressed by various authors.

Restrepo and Campo (2002) understand practice as the modes of everyday action, whether intellectual or material -practices in the plural- that respond to a tactical logic through which human beings shape their existence as individuals and as a community by constructing culture (p. 42). This considers practice as a tool for transforming the world. From an etymological point of view, practice refers to the frequent exercise of an activity following its rules and used by a teacher.

Another author who speaks about this practice, from a critical stance, is Freire (2004), who points out that it must be:

... implicit in thinking correctly, contains the dynamic, dialectical movement between doing and thinking about doing. The knowledge that spontaneous or almost spontaneous, 'unarmed' teaching practice unquestionably produces is a naïve knowledge, a knowledge made of experience, which lacks the methodical rigour that characterises the epistemological curiosity of the subject. (p. 39-40)

In the words of this author, teaching practice is fundamentally human, formative and ethical.

From the formative meaning what was analysed was how the participating subjects perceive teaching practice, what they infer, what are the contributions in relation to what the teachers of the Bachelor's Degree in Education understand and comprehend.

For this purpose, two (2) sub-categories were established to analyse these perceptions:

a) The first is called The new forms of pedagogical relationship, as a possibility to develop a practice that allows the integration of the future professional from a critical dialogue with society (Rodríguez, 2003), that is, with the other. In her article La atención a la diversidad cultural: el reto de las organizaciones escolares (Attention to cultural diversity: the challenge for school organisations), this author invites the teacher educator to reflect permanently on his or her daily practices, allowing him or her to identify social and cultural realities. His contribution is related to the possibility that teacher educators have to rethink their practice based on dialogue and criticism, in order to try to identify whether the type of practice they

carry out is really articulated with the extension processes of the university context where it is located. One aspect to consider in this construct is the idea that all university practice should reflect teaching, tutoring, extension and research activities. Díaz (2000) considers that pedagogical practice transforms the notions of research and extension, making the training process a process articulated in new forms of pedagogical relationships;

b) The second one Collaborative work, related to the interactions between the members of a team that must take place in the practice spaces, generating a process of knowledge construction, which is known as collaborative learning. This didactic strategy is seen as several common ways of structuring the interactions between participants in different collaborative learning activities, as well as the information that is exchanged. This is why Järvelä (2015), in his article How research on self-regulated learning can advance computer supported collaborative learning, sets out some collective learning strategies as key skills required for interaction with others, which he calls co-regulation and shared regulation. His contributions are focused on the permanent need for teacher educators to interact with each other and to strengthen the learning processes, as well as the collaborative work between both parties (teacher and student). Therefore, the teacher in charge of the practice must infer in the learning processes which are the strengths and weaknesses of their students, in order to guide them in the development of skills that allow them to continue learning. Bridges et al. (2011) in their article Interprofessional collaboration: three best practice models of interprofessional education, describe the interprofessional model implemented in three universities (Rosalind Franklin University of Medicine and Science, the University of Florida and the University of Washington), where they conclude that the collaborative approach used favoured the formation of interprofessional teams, but also service learning and communication and leadership skills. Therefore, this study contributes to the need to investigate whether there really is joint and cooperative work for the articulated development of the practices, since they will all have a common objective, in accordance with the principles of communication, coordination and cooperation.

Methodology

The present study was developed with a qualitative methodology, under a descriptive-interpretative approach and whose exercise involved interpreting the perceptions of four (4) teachers observed in the learning units Teaching Practice, Didactic Programming, Assessment of Learning and Teaching and Learning Strategies and one hundred (100) students surveyed. Descriptive because it is based on the narratives of the teachers in the practice spaces, where the most relevant fragments of the participants were identified through coding; and interpretative because after the analysis of the coded units an interpretation of the results was made, in such a way as to explain and understand the complex social phenomena. As a technique for information retrieval, a non-participant observation guide was used to record data from the four (4) selected teachers and a questionnaire for students with thirty-five (35) items on a Likert scale, which was validated using SPSS Statistics version 21 to obtain Cronbach's alpha, which was 0.822 as shown in table 1.

Table 1. Reliability statistics.

Cronbach's alpha	N of elements
,822	9

Source: SPSS software.

Participants were selected by purposive non-probabilistic sampling (Patton, 1990), where the researcher determines which social actors to include in the sample. For this author, the logic that guides this type of sampling lies in ensuring that the chosen cases provide the greatest possible wealth of information. To ensure the anonymity of the informants, they were assigned a code that includes the letter D for teacher, followed by a number given to the observed (D1, D2, D3 and D4), the letter E for student, followed by a number given to the participant (E1, E2, E3 .... .E100) and finally a code is assigned taking the initials of the courses observed (PD1/Practica Docente, PD/Programación Didáctica, EA/Evaluación de los Aprendizajes and EEA/Estrategias de Enseñanza y Aprendizaje). The questionnaire was administered to students in the observed groups, a total of one hundred (100) as shown in Table 2.

Table 2. Students observed per learning unit.

Course / Learning unit	Course code	Teacher code	Number of students observed
Didactic Programming	PD	D1	27
Teaching Practice	PD1	D2	24
Assessment of Learning	EA	D3	19
Teaching and Learning Strategies	EEA	D4	30
Totals	4 cursos	4 docentes	100

Source: Own elaboration (2019).

The responses linked to the two subcategories set out in this document were entered into the SPSS to obtain frequencies of perception, which served as a basis for identifying where their perception leans in each of the nine items related to the aforementioned subcategories and which are listed in Table 3.

Table 3. Aspects assessed in the subcategories for the Formative Meaning of Teaching Practice.

Specific objective	Category	Subcategories	Number of items and aspect
What is the formative meaning with which teacher educators carry out their pedagogical practice?	SigF (Formative meaning)	NFRP (New Forms of Relational Pedagogy)	14. The teacher draws on his or her professional experience to enrich the handling of content established in the Teaching Practice cours.
			15. The teacher encourages dialogue between students (communication).
			16. During the lesson the teacher encourages student participation in extracurricular activities.
			21. The form of didactic communication on the part of the teacher is characterised by the use of clear and comprehensible language.

(Formative meaning)		TC Collaborative Work	22. The teacher establishes cordial relations with his/her students.
			23.The teacher develops co-operative activities in class such as group work, pair work, etc.
			24. The students' actions during the course of the lesson are collaborative and cooperative.
			25. The teacher asks broad, open-ended questions with a variety of answers to students to encourage participation.
			26. The teacher provides the space for students to consult openly..

Source: Own elaboration (2019).

The research procedure was carried out at the UANL, Ciudad Universitaria campus, Faculty of Philosophy and Letters. The following considerations were taken into account: a) Contacting the tutor who will accompany the research process approved by the Postgraduate Evaluation Committee of the UANL for the organisation of a work schedule; b) Contacting the coordinator of the degree in education to request authorisation to access the observable courses and the applicability of the questionnaire; c) Teachers were sent an e-mail requesting their voluntary participation to be observed and audio-recorded; d) Permission was requested from the observed teachers for the applicability of the questionnaire to students. The observations made were ten (10), totalling thirty-six (36) frequencies of fifty (50) minutes each. For the development of the above activities, the dates and times of intervention in the classrooms were agreed in advance, managing to obtain successful information from four (4) teachers. It should be noted that the decision was made to carry out the observation in four learning units because they were those that were directly related to teaching practice.

For the analysis of the data, it was important to faithfully transcribe each of the audios obtained, in order to then triangulate the findings in the light of the theories and the categories and subcategories established as palpable evidence of the study (Álvarez-Gayou, 2003; Flick, 2007), in addition to establishing a control of the reproductions based on the codes assigned to each participant.

Discussion of the results

In order to contribute to the understanding of the formative meaning of teaching practice, the following are some of the perceptions found.

An important aspect where the participants in this study coincide was the relevance of collaborative work from the practices, it was observed that some teachers express in stories such as "...in small groups, please put together the competition from the friezes attending to the 4 conditions established..." (D1. PD), this indicates the articulation between peers to improve practices, which allow to enhance reflection, analysis and criticism.

Another determining factor was the enquiry through the question as evidenced in the contributions of the different narratives found "... What are the levels of concreteness?" "...but by level there is the academic model, how many versions did we say the academic model had?" (D1. PD) as well as "...Natalia, how many class sessions do you have? I have 4 teacher sessions..." (D2.PD1) and "...In what subject? and if it is spatial temporal... How could they

identify it? When can I be talking about something situational...? (D3.EEA), which for Antiseri (1987) is important given that "answers are not obtained if questions are not presented".

Based on the above, it is relevant to indicate that the teachers studied show the questions as problems that require theories to be solved, as evidenced in the following fragment "...From the same ideas presented by Davini..." (D2. PD1) as well as "..." (D2. PD1). This narration is not a report, just to tell me how the class went, yes, this, so, if something like that happens, it has to do with what CELFIS says, that the observation always has to be done 24 hours later maximum because otherwise you lose track of it and even more if the next day you have another class you go..." (D2. PD1).

It is therefore important to continue to generate this framework of reflection in practice, in a way that allows students to create critical thinking. In short, students need to be intellectually challenged with questions and re-questions, through an iterative pathway. A context rich in questions and opportunities, where non-judgement, theory and practice are equally important, both and at the same time build knowledge (Bain, 2007). Undoubtedly, this result coincides with the students' perceptions regarding the six items (21,22,23,24,25 and 26) established in the subcategory of collaborative work, they consider that clear and understandable language is evident in communication (91%), cordial relations between teachers and students (95%), development of cooperative activities by the teacher (98%), collaborative and cooperative actions (96%), broad and open questions that promote participation (96%), and that there are spaces for students to consult openly (92%).

Collaborative work allows for the strengthening of interpersonal dialogue, understood as collaborative interactions and forms in the classroom. In turn, permanent interpersonal communication in the classroom identified as direct and person/reading as evidenced in this account "...let's open the programme format" "I asked them to bring a competition, don't take it out yet..." (D1. PD). In this context, a diverse participation is perceived, while for D1, D2 and D3, the participation is active on the part of their students, since in addition to having the possibility of asking questions, they have the possibility of reflecting and internalising their practice as evidenced in the following fragments "...the question now is how do I feel before starting the execution of the programme, do you think 10 minutes? ... you don't have to make a book... don't write down vague ideas because what you are going to do is read aloud your narrative and from what I am reading you ask yourself..." (D2. PD1), for D4 a passive participation is clear, that is to say, there is follow-up to passive and not reflective reading on the part of the student.

Thus, in item 14 of table 3, it is perceived that the teacher encourages dialogue among students (97%), only 2% consider it occasionally and 1% never. For item 15, the results indicated that 97% of the respondents stated that the teacher encourages dialogue between students (communication), only 2% consider it occasionally and 1% never. Finally, item 16 showed that 86% of the respondents stated that the teacher frequently encouraged student participation in extracurricular activities during class, only 11% considered it occasionally and 3% never encouraged it.

Given this situation, an important concept to take into account emerges and it is the participation among equals (shared participation) observed in the classes, where the teacher encourages the formation of small groups for the exchange of ideas, as expressed in "...the rule is in teams of 6 members, make a song, the idea is to recover the most relevant concepts in an organized way from the concepts that each of you have in your work, the song that you want and introduce the concepts of the chapters, how much time do you have? ..." (D3. EEA), clearly evidencing the following of instructions; as attested by the psychological theories of Piaget and Vigotsky; this importance is reflected in the following quote from Wittrock (1997):

If we accept Vygorsky's theory of the internalisation of intrapsychological processes from interpsychological ones, then peer interactions acquire panicular importance in school because of the asymmetry of teacher-pupil relations. Children never give instructions to the teacher, and rarely ask questions other than procedural or authorisation questions. The only context in which interactive roles with the same intellectual content, giving instructions as well as obeying them, and asking questions as well as answering them, can come into play is that of their peers. (p. 670)

One aspect that was not very visible in this study was the articulation of practice with research; it is perceived as not very relevant, with little familiarity with its characteristics and functions, which causes little incorporation of its knowledge into research and in turn into teaching. This is why it is necessary to involve it from the transversality in the educational processes and in the curricular aspects for each of the programmes that the Faculty of Education has, this will in turn allow the strengthening of the substantive functions in the university contexts.

Conclusions

Finally, and by way of conclusion, although there is a diversity of strategies implemented by teachers, it is important to determine the educational value of these activities, since the active participation of students is related to the processes of realisation (Raths, 1971). This author states that an activity is more substantial than another if it facilitates an active role for students in research, exposition, etc., rather than filling in worksheets or participating in routine discussions with the teacher. He also considers it relevant that activities planned with others generate more opportunities, given that participating in their development and results is more appropriate. Furthermore, he argues that one activity will have more value than another if the learner interacts with reality: touching, manipulating and not just writing or narrating.

Furthermore, in these new dynamics in which the practice courses established in the curricula of the degree courses must develop, it is appropriate to articulate them with the classroom research processes, i.e. there must be a profound influence of research and practice. Traditionally, the practice processes are marked by formalisms related to documents and formats, established hours and follow-up, forgetting the transcendence towards research fields for production. Taking into account the above, practices are perceived as independent, separate and deserted actions, which is why the transformation of a practice with a sense of research and academic production by the actors participating in it, that is to say, one that enhances the investigative character, is urgent. In short, research is necessary, useful and pertinent, which is why it is appropriate to incorporate it into their knowledge and encourage its greater use as a useful resource for teaching.

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