ESIC 2024 Posted: 19/06/2024

Teacher Training: (Dis)encounter between Theory and Practice

Gerardo I. Sánchez¹, Ximena E. Jara², Fernando A. Verdugo³

¹Facultad de Ciencias de la Educación, Dpto. de Formación Inicial Escolar, CIEJUS, Universidad Católica del Maule, Talca, Chile, correo-e: gsanchez@ucm.cl ²Centro Integral de Innovación Social, Universidad Católica del Maule, Talca, Chile, correo-e: x.jara@ucm.cl

³Facultad de Educación, Universidad Autónoma de Chile, fverdugop@uautonoma.cl

Abstracts

The preparation of teachers is a key process in the development of effective teachers, however, initial training always seems insufficient and outdated to produce the expected teaching profile and respond to the dynamic character of today's society. This article reports part of the research "teachers in the process of initial training" (2020-2021), developed in the context of a Faculty of Education Sciences, Chile. Based on a qualitative methodology and a case study research strategy, we worked with 120 pedagogy students in the process of training, who offered their representations regarding the theory-practice relationship in the context of the Chilean educational system. In a complementary way, 5 focus groups were administered with the intention of enriching ideas and perspectives. The criteria to choose them were to be studying a pedagogy program, with experience of practices in schools and that they accepted to participate voluntarily, after signing consent. The results show that the theory-practice relationship can be understood in various ways: dependence, disagreement and integration which influence the way teaching is understood and its exercise. In terms of projections, the need arises to think of a training that in a bidirectional way manages to theorize the practice and experience the theory.

Keywords: Theory-practice relationship, initial training, teaching, Chile

Introduction

Teaching profession and initial training

Clarifying the configuration of a profession and its competences in a context of constant transformation is a challenge for initial teacher training. A challenge that becomes more complex when it is found that teaching is a profession that is composed of theoretical and practical knowledge dissimilar to articulate with each other (Spillane & Burche, 2006).

In addition, the dynamic nature of today's society imposes the development of new competences known in the expression "skills of the XXI century", which implies the exercise of a teaching that achieves, effectively and equitably, significant learning for all students (Reimers & Chung, 2016). Consequently, the training and development of teachers are key elements for building effective teachers (Darling-Hammond, 2017), however, research shows that initial training always seems insufficient and outdated to produce the expected teacher profile (Korthagen, Loughran & Russell, 2006; Vaillant, 2005). For Darling - Hammond and McLaughlin (2004) teacher training involves the development of two roles: that of apprentice and that of teacher with the intention of facing the difficulties that each of them contains. This implies a process that "must engage teachers in concrete tasks of teaching, evaluation, observation and reflection that enrich the processes of learning and development. It must be based on inquiry, reflection and experimentation" (p.2)

On the contrary, teacher training by tradition has assumed an academic and disciplinary character, which is complex in the current scenario in which educational research confirms the determining role of socio-educational, cognitive and socio-emotional variables in initial teacher training for subsequent professional performance (Bächler and Pozo, 2016; Palomera, Fernández-Berrocal and Brackett, 2008).

The process of "training" of teachers is a systematic action oriented to know-how, know-being and knowing how to think that involves a theory-practice relationship and for this "takes into account the transformation of representations and identifications in the subject that is formed in the cognitive, affective and social planes, guiding the process through a logic of structuring, not of accumulation" (Gorodokin, 2006, p.2)

In the field of teacher training, the relationship between theory and practice, between thought and action, has always been problematic (Alliaud, 2017), evidencing a constitutive dichotomy of the model and modern school grammar.

In that perspective, There has been a tendency to isomorphize, manifestly or implicitly, the university scenario with the provision of that theoretical heritage, both epistemological and pedagogical, understanding it as the necessary substrate to be able to carry out a quality educational task, while the school scenario has been dwarfed to the point of conceiving it only as that "contextual receptacle" in which the previously acquired theoretical knowledge could be activated and applied (Ezquerra, et al., 2016, p. 266)

Theory - practice relationships

The theory-practice relationship is an eternal problem when thinking about innovating the pedagogical practices of teachers. Throughout history, two types of response have been proposed and confronted: "the scientific-technological approach and the hermeneutic-interpretative approach, which emphasize the power of theory to dominate practice in the first case, and the power of practice to dominate theory in the second" (Álvarez Álvarez, 2012, p.387). In fact, what has guided the training of teachers is the application of an instrumental or technical rationality approach, which has neglected that pedagogical practices are usually based on implicit beliefs and knowledge, strongly influenced by previous school experience, as well as impregnated with common and experiential sense (Latorre, 2009)

As an enduring model in teacher education, theory precedes practice, and the latter is conceived as the transfer space of the former. "The logic that underpins this model, of an applicationist deductive type, is based on a strong confidence in the power of theory – that is, in the scientific knowledge produced around teaching – and on a reductionist conception of practice" (Guevara, 2018, p.129). Typical of the academic and technical traditions, practice is understood as a field of application of knowledge, methods, and techniques to teach (Davini, 2015).

Traditionally, the relationship between the two has been presented in dichotomous terms. A dualism resolved from the conceptual point of view, but that survives in the reality of classroom processes (Cochran-Smith and Lytle, 2003). On the one hand, the theory that explains reality and constitutes scientific knowledge expressed in laws and principles and on the other, practice, which involves the exercise of carrying out an activity and involves decision-making to solve problems.

The disarticulation is questionable insofar as it circumscribes the activity of teachers to the "instrumental resolution of problems in a rigorous manner through the application of scientific theory and technique" (Schön, 1992, p. 31), while teaching is characterized by being an eminently practical activity (Carr, 2007), and, therefore, situated, related to the context and demands of the subjects, in addition to regulated by a tacit component.

In the field of training, while much of pedagogical theory has tended to focus on the problem of divorce from theory and practice, recent perspectives "go beyond the dichotomy and focus on the experiential knowledge of the learner (Alliaud and Vezub, 2015). In a first effort to solve the problem, attention has shifted to practice and how it can be better linked to theory (Korthagen, Loughran and Russell, 2006) and, therefore, the focus on how teachers learn. Thus, teacher training begins to value practice as a space for the confluence of knowledge and doing (Mc Donald et al., 2013). This is derived from a training more in tune with the contexts of professional practicum that allows objectifying the pedagogical problems that arise in everyday life and exploring new formulas of approach, and that, by the way, relieves the pedagogical knowledge of the content (Abell, 2008). In this way, the practice overcomes reductionist visions (Grossman et al., 2009) and constitutes a learning space in which individual and organizational factors impact teacher learning (May, 2012)

Increasingly, the current movements in relation to the initial training of teachers point to the recovery of the real life of the classrooms, in their diversity and complexity whose points related to the development of teaching, Davini (2015) associates with: The valuation of practice as a source of experience; the importance of exchanges between subjects; the role of the teacher as builder of an experience; the diversity of situations in the classroom and their complexity, as well as their implicit dimensions; The role of reflection on practices, and the artistic and singular dimension of teaching, rejecting or questioning the technical dimension (pp.18-19)

However, the emphasis on the practical does not imply detriment to theoretical training (Ávalos, 2009), since a practical reductionism can decant "in mere casuistic knowledge that does not provide sufficient objective basis for the situational analysis that each teacher must carry out in the course of his teaching and for making decisions about his courses of action" (p.69)

Consequently, the educational debate today must overcome that tradition in which teacher training has been dominated by external references rather than by internal references to teaching work, bearing in mind that it is not a question of falling into the activism of practice nor "welcoming anti-intellectual tendencies in teacher training" (Novoa, 2008, p.208). Consistent with the approach of Vaillant (2013), the challenge is to overcome the theoretical emphasis of training which has been very little interested in the development of specific pedagogical compartments and practices. Situation that is explained by the presence of different conceptions in the initial training of teachers and the theory-practice articulation that include:

	P. P. A.		
Paradigm	Paradigm Articulation theory – practice		
An"enlightened" teacher	The principles and procedures studied above are applied in the workshops		
	(simple application)		
A "technician"	In a transfer perspective, it can be useful to explain the technical		
	references used. But the essential thing is to put these procedures and		
	techniques into practice.		
A "practicing craftsman"	"Practical knowledge" is a whole scheme of action. It is desirable to make		
	explicit the knowledge of experience, but the links with the theory are		
	secondary.		
A "reflective practitioner"	The necessary reflection on the practice and the lived is made in reference		
-	to (by confrontation) psychopedagogical conceptual frameworks.		
A "social actor"	Reflection on anthroposocial bets needs to mobilize criteria of		
	sociological, ethical, philosophical analysis.		
A "person"	Reflection on personal experiences requires psychological criteria and		
•	personal development.		

(Paquay y Wagner, 2010, p, 244-245)

In an integrative vision of the nature of teacher training and work, Alliaud (2017) recognizes that "teachers' knowledge does not recognize pedagogical theory as the only source. The knowledge and practices of teachers are nourished by this other knowledge that teachers and professors when they teach" (p.68)

The challenge is to overcome the logic of teacher training that "operates in two frameworks of action difficult to reconcile: that of virtual worlds and that of the real worlds of teaching, like God Janus" (Montero, 2018, p.311). For this, it is necessary to consider that teaching is not shaped only from practice, it is also nourished by theories that provide subjects with varied points of view and perspectives of analysis that allow a contextualized action based on the understanding of the social, cultural and organizational historical contexts in which they develop professionally (Edelstein, 2015, p. 67).

It is necessary to note a dialectical relationship between theory and educational practice, according to which "the first nourishes and enriches the second, while the new practical knowledge crystallizes in categories and reflections that become part of the theoretical corpus, and that will serve as a starting point for new practices" (Perrupato, 2020, p.122-123)

If we understand as Fiore (2007) writes that "theory designates a state of knowledge (and the) practice designates actions (and) is aimed at changing a state of affairs" (p. 10) we must think that in the classroom the communicating vessels that go from theory to practice are very narrow. However, these ways of conceiving theory-practice relationships in teacher training condition the way in which teaching is subsequently understood and developed. As trainers there are at

least two issues to review: the way in which each one conceives and works the relationship, and the recognition of the representations of the pedagogical student.

Regarding the first, according to the approaches of Korthagen (2010): we, as teacher trainers, create a gap between theory and practice. In the theory-based approach, we do this by overusing theory. In the practice-based approach, we do this by providing practice with too prominent a role (p.85)

Role of representations

The student of pedagogy enters university preparation "with his personal, social, cultural and professional baggage, his motivations, expectations and predispositions" (Hermosilla and Creus, 2018, p.18). Therefore, "the training experience must take into account the subjectivity of those who are formed and the beliefs and hypotheses on which their professional practicum is based" (Domingo and Anijovich, 2017, p.20)

The subjects – teachers in training in our case – elaborate their representations on diverse situations both in their formal and informal experiences in daily life, generating a knowledge that configures the so-called implicit theories that, in practice, come to compete with the new knowledge acquired, and taking into consideration that future teachers have already spent more than 12,000 hours in school during their own schooling, It is possible to notice the weight that these theories play in their representations about teaching. In fact, Pozo et al., (2006) mentions that, if you want to make a real change in teaching practices, it is first necessary to make a change in the implicit conceptions that underlie them or at least be aware of such beliefs and their use.

The representations are considered as "cognitive instruments of apprehension of reality and orientation of behaviors; teachers' presentations can be considered as one of the means that structure their behavior" (Charlier, 1989, p.46). For Baillauqués (2010), "the teacher, before being identified and admitted (in training and in class) for his efforts, his efficiency and his effectiveness, is a (re)known character: sought-found in the individual and collective experience of the school past" (p.62)

Methodology

This article reports part of the research "teachers in the process of initial training" (2020-2021), developed in the context of a Faculty of Education. Qualitative analysis employed the data microanalysis proposed by Corbin and Strauss (2008). We worked with 120 pedagogy students in the process of training, who offered their representations regarding the theory-practice relationship in the context of the Chilean educational system. Subsequently, 5 focus groups were administered with the intention of enriching ideas and perspectives. The ages of the participants range from 20 to 30 years. The criteria to choose them were to be studying a pedagogy program, with experience of practices in schools and that they accepted to participate voluntarily, prior signature of consent.

Table 1. Distribution of participants according to year of student training

	Year of training						
Level	First year	Second	Third	Fourth	Fifth		
Total	40	23	15	23	19		

A qualitative approach was chosen based on the "basic assumption that the social world is a world built with meanings and symbols, which implies the search for this construction and its meanings" (Ruiz Olabuénaga 2009, p. 31). The instrument of approach to the representations of teachers in training was the semi-structured interview (Flick, 2007), which investigated the way in which the theory-practice relationship is conceived, complemented by five focus groups of 8 participants each to discuss perceptions about initial training and, particularly, the nature of teaching work in its theory-practice relationships.

The analysis of the interviews was carried out based on the grounded theory. Once the interviews were administered, we proceeded to: their transcription, categorization of the information, systematization, analysis and reduction of the data, which, according to the approaches of Corbin and Strauss (2008), were worked under an approximation of an inductive nature to reality, which facilitated the identification of appropriate categories for the research for the corresponding content analysis. Additionally, each student was assigned an alphanumeric code, this showed the student's number, followed by their sex, which was an "M" for male, "F" for female and "O" for another, followed by a "2", "3", "4", "5" or "6", depending on the educational level. For example, S1M2 indicates that he is the first male student and is in the second year of training. Complementarily for the analysis of Focus Groups, a numerical code was adopted (GF1, GF2, GF3, GF4 and GF5)

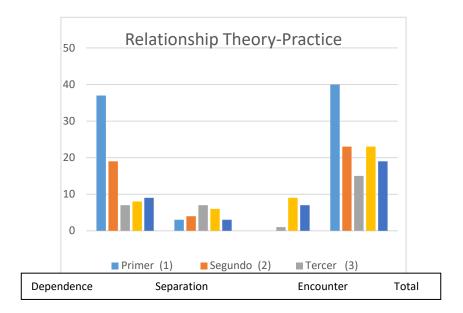
Results

Panoramic view of the theory-practice relationship in primary pedagogy students

Table 2. Type of relationship according to year of training of the student body

Type ratio	Second (2)	Third (3)	Fourth (4)	Fifth (5)	Beginner (6)
Dependence	37	19	7	8	9
Separation	3	4	7	6	3
Encounter	0	0	1	9	7
Total	40	23	15	23	19

Figure 1. Type of relationship according to year of training of the student body



Stories about teaching/training work.

Pedagogy students construct a complex vision of the teaching work, which evidences the separation between intentions and practices; the diversity of contexts in which it is developed; the complexity of the pedagogical act and the public questions it receives.

The theory-practice gaps. The representations of the students show a profession and, therefore, work that evidences the distances between intentions and practices, which means that educational realities rarely conform to the educational intentions that are committed. For this reason, relations of dependence of theory on practice predominate among the interviewees, and of separation that confirm the problematic relationship "between thought and action, between saying and doing" (Alliaud, 2017, p. 63), evidencing a constitutive dichotomy of the modern school model.

Many times, what is discussed in class, is utopian or complex to carry out in the classroom, where the environment of the students is diverse, often hostile and vulnerable (GF3)

A teacher is shaped from the theoretical point of view, but even more from the practice, since, facing the reality of the classroom is totally different from imagining it as the authors say. Every context, every school and every course is different (GF2)

The variety of contexts in which it develops. The notion of a situated work emerges, that is, conditioned by the particularities of the diverse scenarios in which the exercise of teaching takes place, scenarios that in general are described as vulnerable and of high structural inequality with respect to the educational possibilities for boys and girls.

Each context determines the way in which the training process should be developed. It is necessary to respond to the vulnerability of the context and this is always diverse and different, it requires adaptation, openness, and flexibility (GF5)

Reality surpasses everything, "there are a million" situations that can occur within a classroom or at the establishment level, in addition the teacher's work involves not only the classroom but also other responsibilities that are dimensioned just when facing the classroom, the exercise of teaching (GF5)

The complexity of the pedagogical act and the indeterminacy of the situations that arise during the teaching work. Therefore, practice is the space where what has been learned is tested and the teaching work is (re)configured, forcing the deployment of tools other than those studied or presented in the university classroom.

The university has given us a chair of education, didactics, evaluation, diversity, collaborative work, however, there are realities and school contexts where everything we have learned in the university is put to the test, since, on several occasions we must solve multiple problems with our own pedagogical work, but also with the teachers of the schools (GF2)

There is no theory that explains how education should be or that guides us regarding the decisions we must make, on the contrary, everything will depend on how our students are, the context that surrounds them and their previous experiences, therefore, the teacher must be reflective, self-critical, and flexible regarding their practices in the teaching process (GF1)

An initial training that is questioned in the light of the reality of the teaching exercise and the demands that society poses. Within these demands, the so-called skills of the XXI century", imply the exercise of an effective and equitable teaching (Reimers & Chung, 2016), which stresses the response capacity of initial training.

Teacher training is multifactorial, it is not enough with what the university offers as a curricular network, which in the end is a consumer good with a hidden political and ideological charge, but latent (GF1)

The university only teaches us what the books say, and of course, the selection of some books, those that do not talk much about politics, sociology, anthropology of education, which often come from the distant West, and we relegate figures like Freire or Mistral (GF3)

The school is far from what words tell. In practice, some teachers are beginning to question society, but such questioning will continue to be lacking. Because we have not thought about what school means in a neoliberal society and the consequences of this on children and even on ourselves (GF4

3. Relationships of (a) disagreement; (b) dependence, and (c) theory-practice encounter

The theory-practice relationship can be understood in various ways that influence the way teaching and how its exercise is understood. As a pending issue and, therefore, not resolved in teacher training, the stories of pedagogy students allow us to identify relationships of dependence, disagreement and theory-practice integration. In the first case, dependence is associated with an overvaluation of the theory according to which practice represents doing and

a mere application of the first; or an overvaluation of that doing to the detriment of its previous and, therefore, theoretical preparation. In this logic, the slogan is "what has been learned is put into practice (first studied and learned and then practiced)

In the second case, the relationship is presented in terms of disagreement between both derived from partial and dichotomous visions around the nature of teaching work, which usually translates into the tendency to relieve the changing, uncertain, and complex character of the realities for which the theory fails to deliver all the expected certainties and "recipes". The slogan and, by the way, usual expression indicates that practice in schools can be identified as concrete and real teaching.

Finally, the relationship is visualized in terms of theory-practice complementarity, which can derive from one or another focus, while what is relevant is to understand that the teaching work involves a problematic integration: theory and practice, thought and action, saying and doing (Alliaud, 2017).

Option 1. Dependence. Slogan: "What you have learned is put into practice (First you study and learn and then you practice"

It is proposed in terms of the recognition and valuation of a solid training and academic preparation in the university that provides the necessary tools to teach in the context of the school, a context that is instrumentalized as a mere space for intervention or execution supported in the management of disciplinary and pedagogical knowledge.

It is proposed in terms of the recognition and valuation of a solid training and academic preparation in the university that provides the necessary tools to teach in the context of the school, a context that is instrumentalized as a mere space for intervention or execution supported in the management of disciplinary and pedagogical knowledge.

A Cartesian plane starts from a practical approach of spatial orientation, to then, make in a practical way the mathematical exercise of graphing representatively the Cartesian plane and in higher levels apply in the complex geometric theorems and finally relate this with geographical coordinates of planes and maps (GF2)

The teacher is formed by studying, learning, and expanding his/her knowledge, and then in practice He/She checks the applicability of what has been learned. The training process for a teacher in a certain way is like a ladder where we advance gradually, first we study, learn, practice, and apply. We cannot practice without first having the necessary knowledge, nor apply without learning (GF1)

Option 1. (b). Slogan: "There are no general theories in education. We can only construct specific explanations from the reality where we work."

At the university we are taught different theories and different teaching-learning strategies, but these should not be replicated exactly when we arrive at the classroom. Since each context we face is different and each child is a world, we must be able to modify our teaching strategies according to the conditions, and no matter how much we find a way that "accommodate" us, the

main thing is the development of the students, so our profession must be in constant reflection, analysing our work and improving pedagogical practice (GF5)

Choosing a theory as the central basis of our work is anti-pedagogical, since theories alone fall short, they no longer fully cover the various vertices of educational work and the diverse needs of children (GF2)

Option 2. Disagreement. Slogan: "theory and practice constitute opposite realities".

This type of relationship derives from the problematic link between the dimension of knowledge and doing, and particularly when one considers that practice in schools constitutes the concrete teaching that is only learned to the extent that it is experienced. Theoretically, the conceptual world of prescriptions and objectivity and the diverse and real world of teaching are spaces difficult to reconcile, like God Janus (Montero, 2018). In the representations of the interviewees:

Theories are largely utopian and aspire to ideal situations that do not correspond to reality and its complexities (GF2)

When arriving at the classroom, a teacher in training encounters so many difficulties that the university, due to its prescriptive and control eagerness, ends up objectifying or simplifying without greater practical applicability (GF3)

There are many instances in which what we learn, is a "mechanized" process, however, we do not always know how to apply it, because the reality in the educational establishments is totally different (GF4)

Each context determines the way in which the training process should be developed. It is necessary to respond to the demands of the context and the context is always diverse and different, it requires adaptation, openness, and flexibility (GF3)

Option 3. Encounter. Slogan: theory- practice complementarity. The complex nature of the teaching work and the need to link theory and practice are recognized. For this, it is necessary that the students can connect directly with the educational context in order to know it from the beginning and find in the theory elements in which to guide their decisions to problems that are defined as practical. From the perspective of Fiore (2007) we must think that in the classroom the communicating vessels that go from theory to practice are very narrow and certainly bidirectional, mediated by reflective processes.

When this process of learning by integrating theory and practice occurs, teaching is truly understood, a continuous and dependent process that will help to reflect on pedagogical action, and in this way, train a critical teacher who studies and is constantly updated and who, in turn, learns from his own practice and reformulates it (GF1)

From a socioconstructivist perspective (which I personally usually adopt) a "general theory" is not very relevant, because my vision frames the teacher training from a qualitative approach, thus, each particularity will tend to different needs and the general would not be the most appropriate. Identifying and understanding these needs we must detach ourselves from the reality where we work. Even so, I do not want to deny the contribution that the theories that we can

name as general may mean in the training of teachers, but the main thing is to ensure an adaptation to the context where the theory is going to be applied. (GF4)

Education is not based only on the theoretical and only thinking that it should be taught in a way for everyone. Education goes beyond the content that must be delivered. A teacher must be trained through experiences in the classroom with children, where each one is diverse, teachers must demonstrate their abilities, skills, and attitudes, from there the reflection that is done allows to understand the complexity of the teaching task (GF2)

Teachers are educated from the context in which they are located and there must be a theoretical training as a basis built in that training, which is what allows us to know the guidelines under which we exercise this pedagogy, we reflect on it and try to improve (GF4)

If we work theory through practice, taking that into account, I can point out that part of the teacher training is in our work at the university and with our professors, and another one, just as important, is what happens in our practice centers / As teachers we need 50% theory and 50% practice (GF3)

Discussion and conclusions

The teacher is a professional, who builds his pedagogical workspace, "according to complex limitations that only he can assume and solve on a daily basis, necessarily supported by a vision of the world, of man and of society" (Tardif, 2004, p.110). He develops his work facing daily problems for which there are no prefabricated recipes. This requires an initial training aware of the theoretical and practical knowledge that constitutes the profession (Spillane & Burche, 2006). However, "the initial training of teachers continues to be strongly organized around the transmission of content that in the framework of current conditions of development is becoming increasingly outdated" (Braslavsky, 2006, p.91). Additionally, teacher preparation has operated in two frameworks of action that show difficulty in integrating: that of virtual worlds (theory) and that of the real worlds of teaching (practice) (Montero, 2018). Now, a kind of dichotomy resolved from the conceptual perspective, but not in the reality of classroom processes where dualism persists (Cochran-Smith and Lytle, 2003).

Consistent with theory, the results of this research show that a vision of the theory-practice relationship survives centered on the notion of disengagement and on many occasions, particularly in the first years of training, of predominance of the theoretical over the practical:

What is received at the university does not guide the student to deal with the problems that arise. In simple words, theorists "idealize" what must happen, but the reality of the classroom behaves very differently and that displaces (GF4)

Using an analogy, knowledge (or words) can be thought of as pieces of a layman; If I have a certain amount of pieces I can build different structures with that amount of pieces, such as a house. But if I continue learning and obtaining more knowledge or knowing more words, I will have more and more lego blocks that will allow me to generate larger and more varied structures (GF2)

Then, as a reaction, a notion is installed among interviewees who see in practice the great and often exclusive source of learning about the profession. It is based on the diversity of students and contexts with which it faces during the practices and that allow it to experience the teaching exercise mobilizing other types of knowledge, including common sense. By experiencing the teaching practice as a space for intervention that forces him/her to mobilize quick responses to varied problems, the theory he/she possesses seems to be of little use. The reading made by the interviewees is anchored to the slogan "in education we can only build specific explanations from the reality where we work".

I think that the way a teacher is trained varies according to his/her personality, his/her way of facing life, and the way of seeing the world. What really influences is the practical or experiential part, which acts as a filter, because there you can identify "what works and what does not work" (GF5)

I have the growing feeling that you learn to be a teacher when you are in the classroom with children and there it is necessary to give answers to unsuspected problems that arise on a daily basis for which theory simply does not give an answer (GF3)

Finally, although not categorically, the closer the true exercise of the profession is usually visualized, representations that support the need for integration and / or complementarity in which both (theory and practice) nourish and enrich each other. In this way, "the new practical knowledge crystallizes in categories and reflections that become part of the theoretical corpus, that will serve as a starting point for new practices (Perrupato, 2020, p. 123)

Consequently, at the base of initial teacher training the relationships of disagreement, dependence and / or theory - practice encounter tend to survive, which finally condition the preparation of teachers and even the school model, which most of the time tends to monopolize knowledge and marginalize doing. With a doing that is also usually reduced in its complexity and potential for professional learning. This probably explains why teacher training continues to be the subject of questions when thinking about improving education systems, whether in terms of effectiveness, quality, equality or social justice.

Complex theory-practice relationships underlie the possibilities of reorienting the improvement or transformation of teacher education. Without ignoring the sustained efforts of public policies to improve the quality of education systems based on the preparation of teachers, the desired impacts are not always achieved. In fact, the evidence is not encouraging considering that from the North American context the expression "Washed out" and from the European one, the "low impact" attributed to initial teacher training, confirm it and, therefore, force us to review the logics of training beyond the instrumentalism that has characterized it.

The academic and disciplinary nature that teacher training has shown, forces us to assess the individual and organizational factors that impact teacher learning (Britt, 2012), since the exercise of teaching is always the result of the subjects, in which "action and thought go hand in hand, and in this process influence ideas and own valuations resulting from various previous experiences, social and personal" (Davini, 2015, p. 24)

In this way, the formation supposes a profound action on the subject that involves the relationship of theory with practice and "takes into account the transformation of representations and identifications in the subject that is formed in the cognitive, affective and social planes, guiding the process through a logic of structuring, not accumulation" (Gorodokin, 2006, p.2)

Teachers occupy a central place in the relationship between theory and practice in education (Álvarez, 2015, p.188), since the way in which they face the teaching work conditions the type of relationship: opposition, dependence and / or integration. It also includes a reflection on teaching considering that it requires "a contextualized action based on the understanding of the historical, social, cultural and organizational contexts in which they develop professionally (Edelstein, 2015, p. 67) and to achieve this not only requires practice but also theories that provide subjects with varied perspectives of analysis.

To achieve this, teacher training must overcome the tendency to build its models of competence outside the implicit representations of teachers. In this sense, it seems relevant to recognize the representations that teachers in training are building regarding the nature of teaching work with the intention of ensuring that the formation of the possibility of developing the role of apprentice and that of teacher facing the difficulties that each of them entails (Darling - Hammond and McLaughlin, 2004).

It is desirable that these representations are explicit during initial teacher training and at the time of insertion into teaching, and stress them from reflection to make them aware and favor decision-making processes leading to a true understanding of the nature of a work that is initially not known and is tried to format from the university, from the declarations of educational policy or from rather external frames of reference that ultimately hinder the configuration of a profession that is composed of a set of theoretical and practical knowledge that must be integrated in a bidirectional way.

An initial appeal emerges to teacher trainers to focus their efforts on the practice of teaching future teachers. "Teaching practices with which one should become familiar (through observations, stories, cases, simulations) in order to be able to confront, discuss, analyze (resorting to the different theories) and thus sketch/create/imagine answers or alternative ways of acting "(Alliaud, 2017, p.96). In this way, in what Kortagen recognizes as the grail of training, the initial preparation of teachers enables action, to act in real contexts and situations where, from Schon's perspective, the problems of the swamp must be faced, which are characterized by being complex and poorly defined. In this way it is possible to think of a teaching that effectively and equitably (Reimers & Chung, 2016), develops skills in a context of constant transformation.

Therefore, a space for teacher training is required to ensure the dialogue of the specific body of knowledge with the needs of the swampy terrain in which teaching and professional practice finally take place. A training that allows to 'test and contrast' what is offered from the theory, without falling into the omnipotent power of the theoretical, but rather recognizing the practical references themselves, or those who have been and have come to occupy an intermediate space between theory and practice (Montero, 2018, p, 318).

Thus, the relevance of the knowledge of experience emerges, which accompanies from school and university experience to the teacher in training, that which is built in daily activities. This

supposes from the perspective of Alliaud and Vezub (2015), the recognition of the training linked to the contexts and subjects from which they learn to teach, and that constitutes a space for integration of theory and practice, with the intention of producing satisfactory professional modes that overcome the ineffectiveness of academicism with respect to the representations and theories in use and on the other, the uncritical pragmatism of practices.

In conclusion, the representations around teacher training reveal the (dis)encounter between theory and practice. This translates into the presence of a melting pot of expressions: "what has been learned is put into practice"; "school practices constitute concrete teaching"; "You learn to be a teacher in the classroom, that's the real space of what it means to be a teacher"; "stop being a passive agent of learning in the university to an active agent in the role of school teacher as diametrically opposed realities"; and "synergistically linking practice – theory mediated by reflection and decision-making.

At the base of these expressions, and as a challenge, the need arises to think about a training that exceeds the dichotomous responses of the academic gaze and practical thinking to advance to that postulated by Korthaguen (2010), which implies the need to theorize practice and experience theory, from the peculiar framework of experience of each teacher. To achieve this, it is essential that teachers in training have the spaces to reflexively reconstruct their unconscious practical knowledge reflected in their representations. From the perspective of Ezquerra et al., (2016) the challenge is to overcome unidirectional approaches, "replacing them with those other dialogic and bidirectional ones that are constructed in a concentric-expansive way from successive stages of stability and cognitive and/or emotional instability of the participants in the training processes" (p.265)

Acknowledgements

Thanks to all the students of Pedagogy in Basic Education with mention that they shared their experiences of practical training.

WORKS CITED

- Abell, S. (2008). Twenty years later: does pedagogical content knowledge remain a useful idea? International Journal of Science Education, vol.30, n.10, 1405-1416
- Alliaud, A. (2017). Los artesanos de la enseñanza. Buenos Aires: Paidós
- Alliaud, A. y Vezub, L. (2015). Los saberes docentes en la mira: una aproximación polifónica. Revista de la Escuela de Ciencias de la Educación, 11(10), 111-130.
- Álvarez Álvarez, Carmen (2015). Teoría frente a práctica educativa: algunos problemas y propuestas de solución. Perfiles Educativos, XXXVII (148), 172-190
- Ávalos, B. (2009). Los conocimientos y las competencias que subyacen a la tarea docente. En C. Vélaz de Medrano y A. Vaillant, A. (Eds.), Aprendizaje y desarrollo profesional docente (pp. 67-77). Madrid: Santillana-OEI
- Bächler, R. & Pozo, J. (2016). ¿Siento, luego enseño? Concepciones docentes sobre las relaciones entre las emociones y los procesos de enseñanza/aprendizaje. Infancia y Aprendizaje: Journal for the Study of Education and Development, 39(2), 329-348
- Baillauqués, S. (2010). El trabajo de las representaciones en la formación de los maestros. En Leopold Paquay, Marguerite Altet, Evelyne Charlier y Philippe Perrenoud (Coords.), La formación profesional del maestro (pp. 55-87). D.F., México: FCE.
- Braslavsky, C. (2006). Diez factores para una educación de calidad para todos en el siglo XXI. REICE. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en educación, 4(2), 84-101.

- Carr, W. (2007). El docente investigador en educación. México: Universidad de Ciencias y Artes de Chiapas. Charlier, Evelyne. (2010). Cómo formar maestros profesionales. Por una formación continua vinculada con la práctica. En Leopold Paquay, Marguerite Altet, Evelyne Charlier y Philippe Perrenoud (Coords.), La formación profesional del maestro (pp. 139-169). D.F., México: FCE.
- Cochran-Smith, M. y Lytle, S.L. (2003). Más allá de la certidumbre: adoptar una actitud indagadora sobre la práctica. En A. Lieberman y L. Miller (Eds.), La indagación como base de la formación del profesorado y la mejora de la educación (65-79). Barcelona: Octaedro.
- Corbin, J. y Strauss, A. (2008) Basics of qualitative research: Techniques and procedures for developing grounded theory. SAGE.
- Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? European Journal of Teacher Education, 40:3, 291-309.
- Darling-Hammond, L. y Milbrey McLaughlin. W. (2004). Políticas que apoyan el desarrollo profesional en una época de reforma. Profesorado, Revista de Curriculum y formación de profesorado, 8(2), 1-16
- Davini, M. C. (2015). La formación en la práctica docente. Buenos Aires: Paidós.
- Domingo, Á., y Anijovich, R. (2017). Práctica reflexiva: Escenarios y horizontes. Buenos Aires: AIQUE Educación.
- Edelstein, G. (2015). Formar y Formarse en la enseñanza. Buenos Aires, Argentina: Paidós
- Ezquerra, P., Argos, J., Fernández-Salinero, C. y González-Geraldo, J. L. (2016). Transiciones formativas para una práctica docente democrática: La dialéctica entre los contextos universitarios y escolar. En I. Carrillo (Coord.), Democracia y Educación en la Formación Docente (pp. 261-289). Servicio de Publicaciones de la Universidad de Vic.
- Fiore, L. (2007). Didáctica práctica. Montevideo: Editorial Grupo Magro
- Flick, U. (2007). Introducción a la investigación cualitativa. Morata.
- Gorodokin, I. C. (2006). La formación docente y su relación con la epistemología. Revista Iberoamericana De Educación, 37, 1-10
- Grossman, P., Compton, C., Igra, D., Ronfeldt, M., Shahan, E., y Williamson, P. (2009). Teaching practice: A cross-professional perspective. Teachers College Record, 111(9), 2055-2100.
- Guevara, J. (2018). Saberes prácticos en la formación docente para la educación inicial. Pedagogía y Saberes, 48, 127-139
- Hermosilla, P. y Creus, A. (2018). Relatos de formación y saberes docentes. Santiago: Ril Editores.
- Korthagen, F., Loughran, J., & Russell, T. (2006). Developing fundamental principles for teacher education programs and practices. Teaching and Teacher Education, 22(8), 1020-1041. doi: 10.1016/j.tate.2006.04.022
- Korthagen A. (2010) La práctica, la teoría y la persona en la formación del profesorado. Revista Interuniversitaria de Formación del Profesorado, 68, 83-101
- Latorre, M. (2009). Prácticas pedagógicas en la encrucijada: argumentos, lógicas y razones de los actores educativos. Pensamiento Educativo, Revista de Investigación Latinoamericana 8PE), 45(2), 185-210
- McDonald, M., Kazemi, E., y Kavanagh SS. (2013). Core practices and pedagogies of teacher education: a call for a common language and collective activity. Journal of Teacher Education, 64(5), 378-386.
- May Britt Postholm (2012) Desarrollo profesional de los docentes: una revisión teórica, Investigación educativa, 54:4, 405-429
- Montero Mesa, L. (2018). Relaciones entre teoría y práctica en la formación inicial. Percepciones de formadores y estudiantes del Grado de Maestro en Educación primaria. Educatio Siglo XXI, 36(2 Jul-Oct), 303-330.
- Nóvoa, A. (2009). Para una formación de profesores construida dentro de la profesión. Revista de Educación, 350, 203-218.
- Palomera, R.; Fernández-Berrocal, P. & Brackett, M. A. (2008). La inteligencia emocional como una competencia básica en la formación inicial de los docentes: algunas evidencias. Electronic Journal of Research in Education Psychology, 6(15), 437-454
- Paquay, L. y Wagner, Marie. (2010). Cómo formar maestros profesionales. Por una formación continua vinculada con la práctica. En Leopold Paquay, Marguerite Altet, Evelyne Charlier y Philippe Perrenoud (Coords.), La formación profesional del maestro (pp. 222-263). D.F., México: FCE.
- Perrupato, S. (2020). La relación entre teoría y práctica en el campo de la didáctica. Reflexiones pretéritas y proyecciones actuales, Paideia, 67, 117-139)

- Pozo, J. I., Scheuer, N., Mateos, M., & Pérez Echeverría, M. D. P. (2006). Las teorías implícitas sobre el aprendizaje y la enseñanza. Nuevas formas de pensar la enseñanza y el aprendizaje. Las concepciones de profesores y alumnos, 12, 29-54.
- Reimers, F., y Chung, C.K. (2016). Enseñanza y aprendizaje en el siglo XXI: metas, políticas educativas y currículo en seis países. Mejico: Fondo de Cultura Económica.
- Otero, X., Santos-Estevez, M., Yousif, E., & Abadía, M. F. (2023). Images on stone in sharjah emirate and reverse engineering technologies. Rock Art Research: The Journal of the Australian Rock Art Research Association (AURA), 40(1), 45-56.
- Nguyen Thanh Hai, & Nguyen Thuy Duong. (2024). An Improved Environmental Management Model for Assuring Energy and Economic Prosperity. Acta Innovations, 52, 9-18. https://doi.org/10.62441/ActaInnovations.52.2
- Girish N. Desai, Jagadish H. Patil, Umesh B. Deshannavar, & Prasad G. Hegde. (2024). Production of Fuel Oil from Waste Low Density Polyethylene and its Blends on Engine Performance Characteristics. Metallurgical and Materials Engineering, 30(2), 57-70. https://doi.org/10.56801/MME1067
- Shakhobiddin M. Turdimetov, Mokhinur M. Musurmanova, Maftuna D. Urazalieva, Zarina A. Khudayberdieva, Nasiba Y. Esanbayeva, & Dildora E Xo'jabekova. (2024). MORPHOLOGICAL FEATURES OF MIRZACHOL OASIS SOILS AND THEIR CHANGES. ACTA INNOVATIONS, 52, 1-8. https://doi.org/10.62441/ActaInnovations.52.1
- Yuliya Lakew, & Ulrika Olausson. (2023). When We Don't Want to Know More: Information Sufficiency and the Case of Swedish Flood Risks. Journal of International Crisis and Risk Communication Research, 6(1), 65-90. Retrieved from https://jicrcr.com/index.php/jicrcr/article/view/73
- Szykulski, J., Miazga, B., & Wanot, J. (2024). Rock Painting Within Southern Peru in The Context of Physicochemical Analysis of Pigments. Rock Art Research: The Journal of the Australian Rock Art Research Association (AURA), 41(1), 5-27.
- Mashael Nasser Ayed Al-Dosari, & Mohamed Sayed Abdellatif. (2024). The Environmental Awareness Level Among Saudi Women And Its Relationship To Sustainable Thinking. Acta Innovations, 52, 28-42. https://doi.org/10.62441/ActaInnovations.52.4
- Kehinde, S. I., Moses, C., Borishade, T., Busola, S. I., Adubor, N., Obembe, N., & Asemota, F. (2023). Evolution and innovation of hedge fund strategies: a systematic review of literature and framework for future research. Acta Innovations, 50,3, pp.29-40. https://doi.org/10.62441/ActaInnovations.52.4
- Andreas Schwarz, Deanna D. Sellnow, Timothy D. Sellnow, & Lakelyn E. Taylor. (2024). Instructional Risk and Crisis Communication at Higher Education Institutions during COVID-19: Insights from Practitioners in the Global South and North. Journal of International Crisis and Risk Communication Research, 7(1), 1-47. https://doi.org/10.56801/jicrcr.V7.i1.1
- Sosa-Alonso, P. J. (2023). Image analysis and treatment for the detection of petroglyphs and their superimpositions: Rediscovering rock art in the Balos Ravine, Gran Canaria Island. Rock Art Research: The Journal of the Australian Rock Art Research Association (AURA), 40(2), 121-130.
- Tyler G. Page, & David E. Clementson. (2023). The Power of Style: Sincerity's influence on Reputation. Journal of International Crisis and Risk Communication Research , 6(2), 4-29. Retrieved from https://jicrcr.com/index.php/jicrcr/article/view/98
- Ruiz Olabuénaga, J. (2009). Metodología de la investigación cualitativa. Universidad de Deusto.
- Schőn, D. (1992). La formación de profesionales reflexivos: hacia un nuevo diseño de la enseñanza y el aprendizaje en las profesiones. Barcelona: Paidós
- Spillane, J. P., & Burch, P. (2006). The institutional environment and instructional practice: Changing patterns of guidance and control in public education. In The new institutionalism in education SUNY Press
- Tardif, M. (2004), Los saberes del docente y su desarrollo profesional. Madrid: Narcea.
- Vaillant, D. (2013). Formación inicial del profesorado en América Latina: dilemas centrales y perspectivas. Revista Española De Educación Comparada, (22), 185-206.
- Vaillant, D. (2005). Formación de docentes en América Latina. Reinventando el modelo tradicional. Barcelona: Octaedro
- Vezub, L. (2016). Los saberes docentes en la formación inicial. La perspectiva de los formadores. Pensamiento Educativo, 53(1), 1-14.