# DIDACTICS AND TEACHER EDUCATION: PROVOCATIONS

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# **ABSTRACT**

This article discusses the issues raised by research on teacher education and presents reflections about today's schooling demands. In this context, it examines official documents that, from 2015, were formally drawn up to guide teacher education, considering, in particular, the new National Education Plan (PNE) and documents issued by the National Education Council (CNE), namely Report CNE/CP No. 2/2015 and Resolution No. 2/2015. This article examines the information contained in these documents concerning the field of didactics.

OR SOME TIME NOW, CONCERNS ABOUT INITIAL TEACHER EDUCATION IN UNDERGRADUATE programs have been appearing in academic manifestations, in research, in the actions of managers at different education levels, in the media or in associations of different kinds and in various social segments. Although from different perspectives, these manifestations have been aiming at urgent change in teacher education, in view of the demands that face teaching today. In other words, it has been proposed that the question of teacher education must leave the perspective that associates triviality to this process. Indeed, there is an opposition between, on the one hand, institutions and courses that try to conduct a coherent, in-depth work in teacher education and, on the other, many other institutions and courses that only execute a rather generic training routine which fails to provide graduates with effective conditions to work in a classroom, whether with children, adolescents or young persons, depending on the education level they will work with (MONFREDINE; MAXIMIANO; LOTFI, 2013; GATTI, 2014).

A new glance and consideration about how basic education teachers are educated and who educates them is being required in view of the country's social scenario and educational situation, as well as because of the necessities brought by the democracy- and equity-based perspectives advocated in providing schooling for the new generations. Here, we highlight Neidson Rodrigues' (1991) perspective that the primary importance of schooling in modern and contemporary societies

is human education, i.e., the education of social and cultural beings; and that basic education is supposed to help students become people with sufficient conditions to enjoy the resources that social life can provide them so they can have a better way of living, and to participate in collective decision making towards the common good.

To that end, teachers are required to take charge of providing their students with an education that allows them to understand the world, nature and social life so they can learn to make choices based on knowledge and values. It is necessary for teaching professionals to be educated for an effective teacher-student communication, an effective student-teacher listening, a pedagogical dialogue aimed at building and constituting learning. These are forms of acting that require learning and are based on knowledge and cultural practices of didactics and methodologies related to the intentional educational relations that are filled with contents relevant to human and collective life.

For quite some time now, academic and social discussions have been approaching the distance separating the culture and practices of universities and other higher education institutions from basic education, when the former have the responsibility to educate teachers for that educational level. Studies about curricular dynamics in teacher education programs conducted with a universe formed by a myriad of institutions - private, public, community, municipal institutions offering courses in each area of the curriculum of basic education at its various levels have also indicated problems in the development of these curriculums. Such institutions form a broad, complex network in which the highest enrollment rates and the greatest number of students who complete the programs are found in the private system. Further, the private system also presents a high percentage of students who graduate from distance learning programs, which are scarcely evaluated as to their curricular dynamics and internships offered. What is known about these programs is that many replicate the curriculums of classroom courses, therefore having the same problems, which are further aggravated by the fact that they require other means of communication than the ones used in face-toface education, due to mediation by electronic media and others. The most evident problems identified in the curriculums concern the narrow space dedicated to studying didactics, teaching methodologies and practices, and developmental psychology (GATTI et al., 2010, 2012, 2014; LIBÂNEO, 2010; PRETTO; LAPA, 2010; GATTI, 2015; FIORENTINE, 2012).

The new teacher education guidelines issued by the National Education Council (CNE) confirm the need to create conditions for changing this education by recognizing its current limitations, as expressed in Report CNE/CP No. 2/2015 (BRASIL, 2015a).

Building new perspectives for teacher education can gather momentum if associated to the idea of preparing a professional which is fundamental for today's social life. There is no denying that the pillars of our society are founded on the possession of relevant knowledge that provides conditions for exercising citizenship, allowing people a better way of living, and favoring the social processes that leverage human possibilities as a whole. Organized school education as a duty of the state has been the means through which, for more than a century, nations have been privileging the sharing of knowledge deemed important to human, community and civil life. Today, this education acts directly on human-social education processes, comprising not only the sharing of knowledge but also a sharing associated to perspectives involving values, attitudes and ways of acting in relationships pertaining to community and to our natural habitat. In other words, raising awareness about social action. In this direction emerge the essential complexity and relevance of basic education teaching, considering the multicultural, strongly diversified contexts in which it occurs.

All this leads us to seek, particularly in the field of didactics,<sup>1</sup> the educational references necessary for dealing with the new demands faced by teaching in our school systems.

# **TENSIONS AND CHALLENGES**

Today we experience tensions in the proposals and concretization of initial teacher education, with deep-rooted cultural educational patterns in conflict with the emergence of new demands to educational work. These tensions are owing to diversified social and cultural contexts and to the development of new approaches to scientific, artistic and literate knowledge, as well as knowledge of new forms of communication and the technologies these are based on. Questions are raised about the concrete perspectives involved in teacher education, about their relationship with the social and educational needs of new generations, their relationship with political-philosophical perspectives and the role of school education. Dilemmas emerge about how to educate teachers, what scenarios we should consider in planning that education, as well as the role of knowledge of didactics in teacher education. Such questions expand into continuing education, in which tensions emerge concerning the choices made at various levels of educational management about education for teachers, its actual impacts, its anchoring in concrete needs within a particular context, between intentions and what is carried out within the possibilities constituted in diversified contexts.

A teacher is not invented by mere acts of will, professional teachers are educated. As Mizukami (2013, p. 23, emphasis added) says: "Teaching is a complex profession and, as with other professions, it is <u>learned</u>". Essential to this profession is knowledge of the foundations of education and the field of didactics – a field dedicated to teaching,<sup>2</sup>

Here, we use the term 'field' as a territory of knowledge with multiple relations - a topology - with areas that converge towards an object of knowledge. In the case of didactics - educational acts and teaching practices; practices understood as cultural and educational acts with an explicit intentionality - the learning of contents that are structured, theorized on and available in a society, and constituted and valued in a given historical temporality.

Teaching necessarily presupposes learning. It intrinsically comprehends inter-human relations aspects with specific intentionality. It can only be defined as instances of interpersonal sharing.

its bases and practices. Such knowledge, intertwined with knowledge specific to other knowledge areas, is no doubt the basis of both teacher education and the exercising of teaching, which requires an interdisciplinary perspective. This is the direction that the new Curriculum Guidelines indicate for teacher education.

# **NEW STANCES: SHALL WE CHANGE?**

There has been much reflection on the need for new stances in the field of teacher education. Innovative contributions have been found, actions coming mostly from the individual initiative of a few teachers in a given institutional context, thus evidencing teachers' dissatisfaction, as well as their pursuit to change conducts with their individual work in specific teacher education situations. In contrast, we can see difficulties in establishing the value of pedagogical questions per se in the practices of the various licensure programs in institutions dedicated to education for teachers.

In their discussions, schooling researchers and managers have been manifesting concerns about the learning of this profession in licensure programs, the role assigned to didactics and teaching methodologies and practices in teacher education, as well as the role of curricular internships. We should note, however, that these issues and roles are underlined in the National Education Plan (PNE) (Brasil, 2014), in Report CBE/CP No. 2 of June 9, 2015 (BRASIL, 2015a) and in Resolution CNE/CP No. 2 of July 1, 2015 (BRASIL, 2015b), the last two issued by the National Education Council. Only time will show the impacts of the propositions contained in these documents. It is worth remembering that documents are not by themselves 'actors', they depend on effective actions that allow the passing from what is said to what is carried out. Here, a key role will be played by federal agencies, with support from state agencies, in each institution, as well as the role of teachers concerning the propositions in the normative and guiding documents. How will the CNE's Resolution above mentioned turn into educational practices in higher education institutions? As Silva Júnior (2015, p. 133) stresses, "change stems from the organized action of people and institutions which undertake to radically alter given situations". Without incisive, conscious, well-directed action, there is no change. But we must remember that, in order to cause change,

[...] we must be aware and convinced of the historical exhaustion of the analysis forms and intervention processes thus far used to treat the social situation that challenges us, with their ineffectiveness and petrification. (SILVA JÚNIOR, 2015, p. 133)

According to the author, radical change can occur in certain fields of social life, but it is the result of the organized action of people and institutions which undertake to radically alter given situations (SILVA JÚNIOR, 2015, p. 134).

In this line of thought, in order to establish in teacher education institutions a new mode of thinking about and conducting teacher education, and to better define the value and role of didactics and the learning of educational practices in education for teachers, there must be some collective action that allows bringing up contributions from the foundations of didactics as a field of knowledge, as well as its contributions to each of the knowledge areas that are the object of teacher education at its various levels (e.g., knowledge relating to the acquisition of reading and writing skills, the learning of mathematics, humanities, biological and exact sciences, arts, etc.). This implies actions that can reach professionals in various fields of knowledge, which requires some exchanging between didactic theories and practices and diverse contents, through interdisciplinary perspectives.

# GUIDING BASES FOR EDUCATIVE ACTIONS INVOLVING DIDACTICS

In this section, we analyze a few aspects of the CNE documents mentioned earlier. First, however, we examine what is set forth in the new PNE (BRASIL, 2014). This Plan recognizes the need to enhance teacher education courses and to align them with the learning needs of basic education students. The PNE, which was enacted by Congress after years of discussion by various sectors of society, establishes in its Goal 13, Strategy 13.4, the purpose of "promoting improvement in the quality of pedagogy and licensure courses", with the proposal of changing their assessment,

[...] integrating them to the demands and needs of basic education systems, so as to allow teacher education students to acquire the necessary qualification to conduct the pedagogical process of their future students.<sup>3</sup>

These statements signal that a few (dys)functionalities were found in teacher education. The text indicates that, to be a teacher, one must acquire the conditions to cause the pedagogical and teaching processes to occur, aiming at enhanced learning. This requires improving the quality of the education provided in pedagogy courses and other licensure programs, as said earlier. The PNE's text also makes it clear that the school and education systems are the focus of teacher education. The perspectives expressed in the various strategies described

in this PNE goal point to the need to bring teacher education students to learn in terms of doing by thinking and thinking by doing, as well as knowing how and why things are done in school situations. How to enhance these courses? The National Education Council (CNE) gave its answer after discussions with communities of stakeholders.

Let us therefore consider CNE's concern about the need for knowledge of didactics in teacher education. This is expressed in Report CNE/CP No. 2/2015 (BRASIL, 2015a), in the analyses of data and research underpinning its rapporteurs' reflections, leading them to

[...] underline that teacher education has become a field of disputes between conceptions, dynamics, policies, curriculums, among others. Generally speaking, despite the different views, the research and studies mentioned earlier point to the <u>need to rethink</u> about the education provided to these professionals.

This statement reinforces what was already postulated by the new PNE. Below, we highlight a passage of item 2, topic II of this text, according to which, "the concept of <u>knowledge</u>, <u>education and teaching is fundamental</u> to ensure the national education project"; further, on item 8, the concept of teaching is described as

[...] an educative action and an intentional and methodic pedagogical process, involving specific interdisciplinary and pedagogical knowledge, concepts, principles and goals of education which are developed in the sharing and building of knowledge, in the constant dialogue between different worldviews.

The centrality assigned to the pedagogical, intentional and methodic processes evidences that knowledge of the field of didactics also plays a key role in teacher education.

The analyses and remarks conducted in this Report amounted to the proposal of a National Common Basis for Teacher Education, among other aspects described in Resolution CNE/CP No. 2/2015 (BRASIL, 2015b). This Resolution came about with the purpose of ensuring quality standards for teacher education courses in higher education institutions, establishing a national common basis for teacher education. It seeks to enable the realization of a solid teacher education in theoretical and pedagogical terms, as well as in terms of contents, relating theory to practice, building interdisciplinary perspectives, so as to contribute to teacher education graduates' professional exercise. The Resolution also emphasizes that teacher education requires care for ethics and forms of diversity (i.e., cognitive, cultural, social diversity). It contains many educational propositions related to didactics in many of

its topics, using various forms to express it: sometimes it directly uses the term "didactics", others, terms that refer, in the citation context, to knowledge pertaining to the field of didactics, such as pedagogical knowledge, knowledge related to teaching and learning, formal and non-formal educative practices, etc.

Paragraph 1 of article 2 of Resolution CNE/CP No. 2/2015 repeats the concept of teaching already used in the text of Report 2/2015, as mentioned earlier, which includes questions pertaining to the field of didactics. Further, paragraph 2 of article 3 says that, in educational institutions, education is carried out

[...] by means of <u>pedagogical processes</u> between education professionals and students, which combine in the areas of specific and/or interdisciplinary and pedagogical knowledge, in policies, in management, in social and pedagogical foundations and theories, for a broad, citizenly education and for <u>learning at the different</u> levels, stages and modalities of basic education.

It adds that "the combination of theory and practice in the process of teacher education, founded on the mastery of scientific and pedagogical knowledge" is indispensable (article, 3, paragraph 5, item V).

In its Chapter 2, the Resolution refers to the National Common Basis for teacher education, highlighting the knowledge of foundations of educative and pedagogical action and its practices. Article 5 and its items stress the need to enable teacher education students to appropriate "pedagogical dynamics that contribute to teachers' professional development", and that it is important to provide teacher education students with a broad view of the educational process, considering its paces and the psychosocial and historical-cultural development, both of which pervade educational practices. With regard to this Basis, it is worth highlighting the "competent use of Information and Communication Technologies – ICT – to enhance pedagogical practices and expand the cultural education of teachers and students". Teacher education should combine "with the practice and experience of basic education teachers, with their knowledge of the school and of didactic mediation of contents".

With the Common Basis proposed, Chapter III approaches the profile expected from initial teacher education graduates. As expressly stated therein, these graduates are supposed to be able to: analyze pedagogical processes, processes of teaching and learning of contents, and basic education guidelines and curriculums; "read and discuss contemporary theoretical educational sources in order to understand and present didactic-pedagogical proposals and dynamics"; compare and analyze curricular contents for basic education, and know pedagogical concepts and dynamics relating to specific contents; develop and

evaluate plans that use different didactic-pedagogical resources and strategies and educational technologies; and record their activities in a portfolio or another monitoring means (Article 7, items V, VI, VII, VIII, IX). Items IV, V and IX of article 8 clearly state that graduates should

[...] master specific and pedagogical contents and <u>the theoretical-methodological approaches to teach these</u>, in an interdisciplinary way that is suitable to the different stages of human development [...]; relate the language of means of communication to education in didactical-pedagogical processes, showing mastery of information and communication technologies for developing knowledge,

and be able to conduct studies that generate knowledge about students and their sociocultural reality, about curriculum and teaching processes in various scenarios.

No doubt, as can be seen in CNE's proposal concerning the National Curriculum Guidelines for teacher education – which are mandatory by law –, much is required in terms of knowledge of didactics in various aspects, conditions, contexts, processes, media and supports.

What answers do we have in terms of academic output in didactics to the educational challenges posed by the new PNE, by Report CNE/CP No. 2/2015 and by Resolution CNE/CP No. 2/2015? What is available in terms of consolidated knowledge? How to dynamize the construction of new knowledge in this field? These are questions that challenge us.

# KNOWLEDGE PERTAINING TO DIDACTICS

In discussions about initial teacher education, we can see a questioning by various interlocutors on whether there is really a role for didactics in teacher education. We may be amazed by such questioning, but it occurs in various knowledge areas when it comes to education for teachers. Not for no reason the discipline relating to this field of knowledge has been withdrawn from the curriculum of many licensure programs over the years, to the point that it cannot be found in many of them and was never included in so many others. In virtue of CNE's new resolution on the National Curriculum Guidelines for teacher education in licensure programs, didactics starts to be considered as one of the components of the Common National Basis proposed, which restores its intrinsic value for teacher education projects.

In the 1960's and 1970's, this field of knowledge was, on the one hand, heavily influenced by perspectives considered excessively technicist (with behaviorism-based teaching protocols or because of the emphasis on specific techniques presented as recipes) and,

on the other, heavily biased with regard to psychology (for example, studying in the discipline of didactics theories of Piaget, Carl Rogers, Vygotsky, etc., which are typically contents of cognitive psychology, without dealing with pedagogical methodologies). In part, in courses where didactics appears in the curriculum, syllabuses with the latter approach can still be found (GATTI; NUNES, 2009; GATTI et al., 2012). There was no shortage of criticism towards both currents, and in the 1980's, the field acquired in Brazil connotations of a more culturalist spectrum, besides being influenced by theories of the imaginary, separating further from teaching per se and from questions relating to school as a field of learning. In terms of research, these questions are progressively put aside, particularly based on positions and concepts of the so-called "critical theories", specially towards the 1990's. This went on clearly out of pace with what occurred in other countries where studies about teaching matters advanced, building new theoretical and methodological approaches in the field of didactics. According to Lenoir (2000), these new approaches incorporate interactionist and socialhistorical perspectives, in various ways and in complex visions, in a line of thought that considers education through the understanding of relationships between people, knowledge and forms of communication in context, with the purpose of building pedagogical actions. Studies start from thinking about educative actions, thus creating fecund concepts in the practice-theory relationship and producing instrumental sets anchored in a reflection about their uses and purposes, in contexts complexly considered. According to this author, the latest advances in the field are constituted from practice to theorization, then back to new practices, in a continuous dialectical movement, which makes didactics fecund. In other words, knowledge in this field becomes anchored in a building process that is at once praxeological and axiological. As Lenoir (2000, p. 189) argues, without returning to practice and without going through axiology, knowledge runs the risk of being just a "simulacrum". In this vision, knowledge is mobilized to understand situations and relationships and infer/create new modes of action. This vision is founded on the analysis of the socio-historical character of the knowledge to be taught and the goals of teaching per se, considering criteria of pertinence, rather than legitimacy. Also relying on propositions by Andrès (1995) and Lenoir (2000), the construction of knowledge in the field of didactics has recently been starting from the results of a critical analysis of the social context and real situation in which the teaching of a given discipline occurs. Thus, the question of producing coherent, action-guided theory, as well as social contextualization, becomes central. It is important to underline that this perspective comprises the indispensable interrelation and interaction between teaching and learning processes, the meanings of contents and educational processes, as well as the incorporation of various epistemological perspectives.

Research in this line of thought has an interactional and situational approach that seeks to consider all the relations between the sets of different factors pertaining to questions related to educational actions: student, teacher, knowledge, situation, context, forms of communication and relation. Thus, the field of didactics should constitute itself as a reflection capable of translating the interface between pedagogical thought and educational practices and vice-versa. We must also consider the importance of the contribution of syntheses and meta-analyses concerning what is built in the field of didactics by studies focusing on more delimited and particularized objects. There are many such studies in various teaching areas. The question is: what reflections, contributions and propositions do they offer as a whole? This kind of work – analyses of various, situated studies – is seldom conducted for building broad views in the field, with theorizations and the consequences thereof, or reviews and critiques that allow methodical advances of knowledge in the field. One cannot dismiss the relevance of the knowledge produced by studies and research of didactics presented in congresses, books, compilations, articles. But, in general, these works lack integration into a whole. When produced along clear lines and with theoretical-methodological security, they form a significant collection, and yet a disperse one. In her foreword to the tour-de-force, network-based study A didática no âmbito da pós-graduação brasileira [N.T.: Didactics in Brazilian Graduate Education], Veiga (2016, p. 17) points out that, despite the set of contributions evidencing didactics as a real necessity of teachers, it occupies "a modest place" in graduate programs, "leaving a vacuum in theoretical studies of a disciplinary and investigative nature". As regards elements coming from the research conducted, she points to a few weaknesses concerning the evidence presented by the studies: dispersion of researchers' academic output in relation to the research stream they are linked to; disconnection between syllabuses and scientific output; insignificant output focusing on didactics in the five Brazilian regions; the non-consolidation of didactics as a field of education and investigation; and an emphasis on research about foundations to the detriment of investigations on didactic and pedagogical practices, which may translate into a certain "unconcern with questions of teaching and pedagogical practices in classroom" (VEIGA, 2016, p. 18). She also indicates the discredit of the discipline in the context of research groups in education. A leap might be achieved from the wealth of analyses brought about by this study, a state of the art for opening new, more interwoven paths to build has been occupying in knowledge in didactics. This is a challenge that is posed.

These studies sought to map the place that didactics graduate research output in education (2004-2010).

In Brazil, in particular, the possible dialogue between the knowledge built in the field of didactics, where contributions emerge from various fields with different perspectives, and graduate teachers in licensure programs, ends up facing obstacles. On the one hand, there are no specialist, recognized groups dedicated to producing meta-analyzes based on large sets of studies and research about basic themes which might contribute to educational practice and theorization and be included as meaningful curricular content into various fields of knowledge - quite particularly in undergraduate initial teacher education/licensure programs. On the other, there is a culture among graduate teachers, who generally do not tap into the results - from consensus among solid investigators - obtained through investigative work in didactics, as they consider these a priori inexistent, fragmented or vague. However, it is necessary to consider that there are few, if any, syntheses of knowledge accumulated about basilar questions in the field of didactics which are motivating and accessible in terms of language to interlocutors in various areas (letters, philosophy, arts, the "hard" sciences"). It would be important for groups of researchers to form in order to offer a contribution of this nature from time to time.

With such concerns and considerations, it is clear that vital importance is assigned to the presence of knowledge in the field of didactics in teacher education by official documents which guide that education. Those who dedicate themselves to research in this field should feel provoked with regard to the contribution they might offer to what teacher education will come to demand.

# **CLOSING**

The interaction between generations that occurs in schools still lacks renewal/change in educational processes, as the meaning of classes lies in mediating the contact and cultural elaboration occurring in different areas of knowledge, of moral and social life. In schools, teachers have the role of creating and recreating modes of providing their students with more effective, cognitive and socio-affective learning. The class and the knowledge areas, the dialectics in the day-to-day relationship between teachers and students, the moral sphere of that relationship, the intervention therein of local and universal knowledge, in the sociocultural encounter between diverse partners, all this demands practices with foundations that come to provide support to educational action.

Thus, educative practices leave the triviality with which they are usually considered, and become the essential focus for enhancing school education and, moreover, for life in society, given the new outlines of the challenges contained in providing significant learning for children and youths in their forms of development in today's world.

New challenges are posed to teaching in the day-to-day of classrooms and we are called upon to build motivating modalities to work with the education of the new generations and to allow them the appropriation/ construction/reconstruction of systematized knowledge in our civilizing process. Knowledge that is basic for understanding and preserving the natural habitat and social and cultural life in communities. This implies an intensive relationship between thought and the concrete actions situated in classrooms and sociocultural contexts. Further, it is necessary to consider that educative practices allow the emergence of new knowledge about the pedagogical relationship. The intrinsic value of such knowledge – its social, educational, epistemic and ethical value - cannot be worn away, it must be demonstrated and built through the interaction and intersection of any knowledge we can academically constitute in its imbricate relationship with school realities. Let us say no to the impoverished rules of action protocols, but yes to robust theoretical-methodological constructions with a relevant meaning to teaching.

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