

Didactics in Pre-Service Teacher Education: Experiences of a Teacher's Teacher in (Self)Development*

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ABSTRACT

This paper analyzes some educational experiences already developed in the Didactics subject, in pre-service teacher education courses at the Federal Institute of São Paulo, Itapetininga campus, Brazil. The main objective is to share some alternatives for the teaching practice of Didactics, while placing a theoretical lens on experiences lived as a teacher's teacher. In the end, this manuscript is expected to have dual utility: first, on a superficial level, that it presents possibilities for diversifying teaching in initial teacher education; second, at a deeper level, that it allows an analytical examination of the meanings of teacher education itself.

KEYWORDS

Didactics. Teacher education. Experience.

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A Didática na Formação Inicial Docente: Experiências de um Professor Formador em (Auto)Formação

RESUMO

Este artigo analisa algumas experiências formativas já desenvolvidas na disciplina de Didática, nas licenciaturas do Instituto Federal de São Paulo, campus Itapetininga. O objetivo principal é partilhar determinadas alternativas para a prática do ensino de Didática, ao mesmo tempo em que se coloca uma lente teórica sobre as experiências vividas como professor formador de futuros professores. Ao final, espera-se que este manuscrito tenha dupla serventia: primeiro, num nível superficial, que apresente possibilidades para diversificar o ensino na formação inicial de professores; segundo, num nível mais profundo, que permita um exame analítico a respeito dos significados da própria formação de professores.

PALAVRAS-CHAVE

Didática. Formação de professores. Experiência.

Didáctica en la Formación Inicial del Profesorado: Experiencias de un Formador de Profesores en (Auto)Formación

RESUMEN

Este artículo analiza algunas experiencias formativas ya desarrolladas en la disciplina Didáctica, en cursos de pregrado en el Instituto Federal de São Paulo, campus Itapetininga, Brasil. El objetivo principal es compartir ciertas alternativas para la práctica de la didáctica, colocando una lente teórica en las experiencias vividas como docente que forma a futuros docentes. Al final, se espera que este manuscrito sirva para dos propósitos: primero, a un nivel superficial, que presenta posibilidades de diversificar la docencia en la formación inicial del professorado; en segundo lugar, a un nivel más profundo, que permite un examen analítico de los significados de la propia formación docente.

PALABRAS CLAVE

Didáctica. Formación de profesores. Experiencia.

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Introduction

The main objective of this paper is to share some alternatives for the practice of teaching Didactics, while placing a theoretical lens on experiences lived as a teacher who trains future teachers. It has been a little over ten years that I have worked as a teacher trainer in various degrees, such as Pedagogy, Letters, Physics and Mathematics. Of these ten years of teaching, little more than half of that time has been spent in the exclusive position of teacher trainer, at the Federal Institute of São Paulo, campus of Itapetininga, in the southwest of the Brazilian state. Here, in this text, we discuss a specific section of these activities carried out along this luster: some formative experiences developed with Didactics, in different semesters and undergraduate courses.

Over the past five years, it has been a metaphorical struggle, external and internal, to deal with Didactics, especially as a discipline. I explain. What is called an 'external struggle' is the overcoming of the old stigma of Didactics, recognized by Marin, Penna and Rodrigues (2012, p. 60) as the relationship between "the teaching process and its products, aiming to answer the question about which the best ways to teach and prepare the teacher". This is a technical conception of Didactics that, according to the authors, dates back to the years before the 1980s, when it was realized that it was necessary to go beyond the mere prescription on how to teach, making Didactics not only critical, but also social and, above all, politics. The history recovered by Garcia e Silva (2019) also points to the 1980s as a time of rupture with technical, instrumental and prescriptive didactics.

Even so, four decades after that nod, in the recollection of the second decade of the 21st century, undergraduate students still begin the course of Didactics with the expectation that they will learn the best ways to write on the blackboard (usually with chalk); the most modern and "attractive" schemes for organizing PowerPoint® slides; to identify the most suitable online simulators to "motivate" students; to recognize the most successful ways of conducting group dynamics to strengthen collective learning ... or, still, became acquaintance with the (pseudo)innovation of traditional education, named as active methodologies (MORAN, 2018), in which the center of the teaching and learning process is the student body that learns, not the content that is taught.

Internally, the metaphorical struggle regarding Didactics is directly related to this historical delay in maintaining its *status quo* as a technique, instead of its more coherent conversion as a critical, social and political element. After all, as much as I believe that it is necessary to divest the undergraduate students from this technical expectation, as it is probably there that the centennial maintenance of banking education is found (FREIRE, 2011), it has not been easy to identify evident ways for this conversion to take place in everyday life teacher training. It is a constant search, very close to that pointed out by Pimenta and Lisita (2004, p. 89), as it relates "to the theoretical and practical challenges that didactics need to face in order to contribute to the formation of teachers in their specificity, which is teaching to teach". So, once again appealing to the metaphor, I believe it works like an iceberg, in which only a small portion becomes visible.

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This means that, although it still gives lessons in Didactics that seem technical, its essence has been turned into something else, more critical, social and even political. At least that is what I hope to recognize with this text, when revisiting some experiences lived over the past five years. In fact, this is not the first time that such experiences are recalled and analyzed by an analytical lens (FORTUNATO, 2020; 2019a; 2018a). But, different from these previous assessments, the examination becomes more severe, as it was identified that "Why from Didactics the teacher's training is not favored?" (HERRÁN; FORTUNATO, 2019). Synthetically, when thinking that Didactics would not be enough to train teachers, a radical investigation was proposed, imagining a kind of generalized misunderstanding in teacher education, as a way to enhance another way of looking at education. In this sense, practice or reflection would not be sufficient, as a more complex understanding of what you do as a teacher is needed, what you think about, but, ultimately, what you are, essentially.

Thus, in order to achieve the proposed objective of sharing experiences regarding the teaching of Didactics for future teachers, the article was organized in three sections. First, we seek to revisit the first experiences with Didactics from the moment I became aware that it was necessary to go far beyond technique - as was identified four decades ago by Candau (1984) as a fundamental Didactics: do not refuse the technique, but recognizes it as a social and political element of education. In the second section, an experience is shared in which the teaching techniques carried out collectively are exalted, however within a perspective of intervention in the school routine. In the third and last section, a bold proposal for teaching Didactics is presented, which is believed to have achieved a fundamental change, as it is about teaching what is not known. In the end, it is expected that this manuscript will serve two purposes: first, at a superficial level, which presents possibilities to diversify teaching in initial teacher training; second, at a deeper level, which allows an analytical examination regarding the meanings of Didactics in the training of teachers.

The First Steps of an Experimental Groping

The pedagogue persecutes individuals who are obstinate in not going up the paths they consider normal. But did he ask himself, by chance, if this science of the stairs was not a false science and if there would be faster and healthier paths, in which he would proceed by leaps and strides? If there was not, according to the image of Victor Hugo, a pedagogy of the eagles that do not go up the stairs? (FREINET, 2004, p. 15).

As already outlined in another text (FORTUNATO, 2013), it was from the educational ideas presented by Célestin Freinet that I recovered the enthusiasm for teaching that I had lost during the years of initial formation. Although there is a whole theoretical framework about the school and its teaching and learning processes coined by Freinet, over a few decades of practice as a teacher at the French basic school, I will stick to some predicates regarding what was learned with him about teach. Roughly speaking, the French-speaking educator constituted his pedagogy based on experience, being contrary to education that is built far from the school floor through laboratory theories. Thus, one of the main concepts of Freinet's pedagogy is the proposal of "experimental groping" or, more simply, the idea of trial-and-error.

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According to Freinet (2004, p. 38), no explanation can substitute the learning provided by the experience, having affirmed the following: "Unfortunate education that intends, by theoretical explanation, to make people believe that they can have access to knowledge through knowledge and not through experience". This excerpt contains an eloquent synthesis of a life dedicated to transforming school education: no more sitting, listening, memorizing and repeating ... the ideation is different: walking, observing, handling, doodling, in short, trying. The mistake would be nothing more than a mere refraction of doing, whose attempt comes only from the learner.

So, when I started to become aware that I had actually taken on the responsibility of a teacher's teacher (after a five-year period on the job), I started to abandon the traditional university class, theoretical par excellence, and to use other ways. All plucked from nowhere but experience, combined with a little intuition (a word disgusted by academia) and even daring (another word that is not used in the annals of science). The initial ideas were quite incipient, unsystematic and - almost certainly to say - random.

One of the first experiences with the Didactics discipline was under the proposal that each student would choose what he would do, including the ways in which they would be evaluated. This attempt was organized in the Physics teacher training course, in a class with about a dozen undergraduates. When returning to this semester, in memory, what appears first is the difficulty in sharing the idea and, therefore, making it understood that the discipline schedule would be a kind of moment to talk about what one would like to produce, in comparison with what was effectively being achieved.

Starting from a broad, nonspecific and common-sense idea of Didactics, the pedagogical work, in that referred semester, was conducted in an almost irregular way, because I did not know what we were going to develop - in fact, we did not even know if something would actually be accomplished. The initial motto for the work was: use this discipline to learn something you would like to discover about education. It seems that this motto worked, since we saw the desire to scrutinize the classic discussions about Didactics in Brazil, through a systematic study, carried out by a pair of undergraduates, of seven works written by José Carlos Libâneo (MORAIS; CAMILO, 2015).

Another student also opted for theoretical research work, focusing on the idea of a "good teacher". His reflections were woven with the help of the famous book by professor Maria Isabel da Cunha (2012), whose first edition was published in 1989, being reissued successively year after year. When producing a review of the aforementioned work, the licensee can make contact with different ways of qualifying a teacher as 'good', because such a predicate is always contingent (OLIVEIRA, 2015).

Another experience with reflection for Didactics through writing was produced by two students who listened with curiosity about the work of Célestin Freinet. Together, they studied the techniques of the author's Pedagogy, investigating the possibility of adapting some of their educational methodologies for teaching physics in high school (SILVA;

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CUNHA, 2015). Even a short time later, we launched together in an experimental attempt, just as they learned from Freinet, to teach thermodynamics through one of the techniques: the studio (CUNHA; TERRA; FORTUNATO, 2017).

Even more reflection about education was developed through writing: the concept of gamification (now referred to as gamification) applied at school. The study started in the Didactics discipline (TEICHNER; FORTUNATO, 2015) and continued for another year as a scientific initiation research project, during which the possibility of working in school education with elements of games for engagement was verified, mainly joy, fun and progression (TEICHNER; FORTUNATO, 2017).

Finally, in this discipline, conducted without a plan or direction, the first work carried out spontaneously within a public school emerged, in a complex partnership involving undergraduate students, students of the first years of elementary school, teachers of basic education, teacher educator and governing body. A student, fascinated by the role game, the RPG (Role-Playing Game), developed a system in which children would need to develop knowledge of Science and Mathematics to solve the challenges created in and for the game.

Unfortunately, except for the presentation at a local congress and the publication of their respective summary (OLIVEIRA; FORTUNATO, 2016), there are no records of this work, except in memory and some pictures with the children in action. Even so, this embryonic project, born in the discipline of Didactics, lasted for another year in other schools and institutions of non-formal education. In addition, it paved the way for several other projects of a similar nature. In the following year, for example, in the discipline of Didactics for the degree in Physics, we coined the project called "Show of Physics in the Dissemination of Science", with which we were in more than 10 different locations, taking science through fun for more than one thousand elementary and high school students (FORTUNATO, 2018b).

It was not just the RPG game and the Show - elements for an education through play - that remained as a result of this first experimental attempt to deal with the discipline of Didactics, carried out in 2015. In the following years, several projects were carried out in the context of the discipline, such as the possibility of developing, together with undergraduates, different ways of approaching science teaching in places of non-formal education, trying to bring them closer to the realities of children and adolescents in a situation of socioemotional vulnerability (FORTUNATO, 2019a).

That way, throughout the semesters, in the different undergraduate courses in which I worked as a teacher's teacher¹, the Didactics discipline became a mosaic metaphorical, since we were, at the same time, in municipal and state schools, technical school, Non-

¹ In addition to the aforementioned degree in Physics, the Federal Institute of São Paulo offers a degree in Mathematics and the Special Teacher Training Program for Basic Education, which enables bachelors and technologists to teach.

Governmental Organizations. Governmental and inside the prison and Casa Foundation located in the municipality ... Each place of education became a project that was developed by the undergraduates according to the interest of each - some, even, unfolding to participate in more than one activity, even concurrently (FORTUNATO, 2019a; 2019b; 2018a).

Thus, when looking back with the intention of recognizing the first efforts of an "experimental attempt" for the teaching of Didactics, as recommended by Freinet, the idea of trial-and-error becomes clear. In enumerating the results obtained, in principle, only the positive aspects of this type of work seem to be evident. Nevertheless, it is necessary to recognize the weaknesses in this form of teaching, since, being unsystematic, it requires great diverse efforts. One of them concerns the theoretical study itself, which is reduced due to the time spent imagining, planning and executing the different activities - even if they are theoretical studies, as these are deepened in their specificity, leaving aside other possibilities. Another effort concerns the technical aspect of student evaluation, as the student needs to be seen as a collective, in which the instruments used to verify how much each student absorbed the contents listed in the course's menu are recorded.

Therefore, when carrying out this assessment, another "experimental attempt" was carried out, trying to combine the realization of something with the collective control of the teaching and learning process for all students in a Didactic class. Looking analytically at this group experience is the subject of the next section.

Would it be Possible to Teach Didactics with Collective Work?

With environmental education, the school, the contents and the role of the teacher and students are placed in a new situation, not only related to knowledge but also with the use we make of it and its importance for our daily political participation [...] in environmental education, in particular, it is essential to consider that you do not learn from someone, but from someone. (REIGOTA, 1999, p. 82).

The analytical balance of the first experimental attempts developed intuitively with the Didactics discipline led to a reorganization of the pedagogical work. Thus, when thinking about the systematic theoretical study and the issue of global assessment through instruments common to all students, I chose to plan the discipline, for the first semester of 2019, in order to involve the students around a single theme, challenging him to mobilize an entire school to think together: the environment.

In addition to the elements identified in the balance sheet, this planning was organized based on three indicators: (i.) The importance of the theme, of which I was a militant for some years (FORTUNATO, 2017), emerging in discussions by the students themselves; (ii.) a singular experience, still lived as a student of Pedagogy, at the beginning of this century, during which I had the (only) opportunity to be in a school, in a concrete teaching situation, lived directly with young people of basic education; and (iii.) the partnership signed with a municipal school, where several projects have been developed aimed at strengthening the training of undergraduate students, continuing education for the school's teachers and elementary school students. Let's do it by steps.

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The class in question, formed by about 30 students, was from the Special Teacher Training Program for Basic Education, referred to as Pedagogical Training. It is an initial teacher training course for graduates. So, one day of the Didactics class, right at the beginning of the semester, I entered the classroom and the students were discussing the damage to the ecosystem caused by the construction of popular housing in a rural neighborhood of the city ... sewage being discharged into the river without treatment of the effluents, deforestation, death of wild animals, etc. Immediately, I remembered a passage from the book "Care, School!" (HARPER *et al*, 1980), prefaced by Paulo Freire, regarding the mass work of domestication and maintenance of the status quo carried out by the school. The passage read as follows:

HISTORY CLASS. The bell rang. The History teacher entered the room, but the discussion between the students continued, intense and passionate ... Two students in this room at the College of Geneva are Spanish. The night before, General Franco had ordered the execution of three opposition Basques, which provoked reactions across the world. The students turn to the teacher and ask for his opinion, his help to understand what was going on: "Now silence, shut up, it's time to start History class...". (HARPER *et al*, 1980, p. 63).

Thus, the discussion of the students on a topic outside the contents of the discipline that was about to start was, for me, analogous to the situation of the students in the History class in Geneva. Should I, then, ignore the concern about the environmental damage caused by human action in the vicinity of the Institute and "teach" Didactics? Or would it be better to let the dialogue go on, until the subject runs out between peers? Or, could it incorporate the theme that was latent within the objectives of a discipline that deals with the complex task of teaching?

Although it could lead pedagogical action along any of these three paths, each would imply a different conception of education. Thus, as I was not interested in organizing the Didactics discipline in its most technical and traditional conception, whose criticism has already been addressed in this article, I disregarded the possibility of ignoring the environmental discussion in favor of the curricular contents. On the other hand, if I had followed the second path, that is, letting students discuss freely about the subject that interested them, I would be repeating an experimental groping experience, as outlined in the previous section. There remained, then, the way of trying to incorporate the theme that attracted the student to the purposes of the discipline's menu.

It is important to note that this option was facilitated by the fact that the environmental theme was not an unknown field to me, having worked for a few years in militancy for environmental education (FORTUNATO, 2017), including recalling that my academic debut was the publication of a specific essay on the theme (FORTUNATO NETO; FORTUNATO, 2009). Furthermore, despite the difficulties of thinking about a form of social organization that corresponds to the Balzakian ideals of sustainable development, research and environmental education cannot be abandoned (FORTUNATO, 2015).

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It was then proposed, to Didactics students, the mission of thinking about the relationship between the surrounding environmental problems and the challenges of working with environmental education at school. On the one hand, the simplest job of showing the value of nature to young people is placed - which has been done in a formal and non-formal way since the 1960s, if not before - and, on the other, as social and cultural organization of the space, designed to accommodate the exponent of the population, tends to be the greatest obstacle to the unattainable ideal of sustainable development. Even so, it is necessary to think about issues related to nature, preservation and the entire complexity of the environment in schools. As a guideline for the action, we took teaching material organized by environmental activists at the beginning of the century, called Basic Environmental Dictionary. In this material, like an illustrated glossary, there are a multitude of words and images aimed at environmental awareness that could very well collaborate with the construction of several pedagogical activities. The challenge was accepted.

The concrete teaching context, from which the action plan would be built, was immediately identified through a very friendly conversation with the school management, which has been the site of educational partnerships for teacher training. As the proposed theme was Environmental Education, considered as fundamental for the school's governing body, we were given what is popularly called "carte blanche" for the organization of work; that is, we could plan and execute whatever was within our reach. With this prerogative given, we decided to prepare an intervention project that would reach all students at the school at the same time, without distinction. It would therefore be necessary to plan educational activities for seven classes in the early years of elementary school, from the first to the fifth year, each with approximately 25 male and female students.

Upon returning with this scenario to the Didactics class, the undergraduate students readily organized themselves, choosing to create seven working groups, each focusing on a different class. In this way, it seemed possible to meet the challenge of carrying out an educational intervention throughout the school. Organically, the students themselves separated the seven classes of the school between the groups, immediately starting to read the proposed material as a starting point for environmental action.

Throughout the Didactics classes, the groups met with each other and discussed proposals from previous experiences and from the readings they carried out regarding teaching methods aimed at environmental education. As ideas emerged, they were presented collectively, so that all graduates were made aware of their colleagues' proposals, with the triple objective of science of the activity as a whole, collaboration with the improvement of the presented plan and inspiration for their own work. In addition to these exchanges that were occurring throughout the classes, we decided to stop for two moments, in which each group would present their activity in order to experience what was proposed. The first stop was made well in advance, so that the groups would have enough time for the necessary adjustments, perceived with the experience. The second stop would be on the eve of the effective action in the school, with the purpose of refinement, if necessary.

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The result of this discipline was the holding of an afternoon of educational activities at school, involving all young elementary school students and their respective teachers in environmental education activities that were coined and developed throughout practically the entire semester. For most undergraduates it was their first educational experience with children; for some, it was even the first experience as a teacher.

In the week following the intervention, we returned to the Didactics class with the purpose of conducting a self-assessment of the educational action. This was done through a conversation circle, during which the effective positive result of collective work and learning in practice, realized in a concrete school teaching environment, was perceived. Still, the need to register all the work was identified, launching a collection of the activities built (FORTUNATO, 2019c), in order to become a reference for future work, either for the graduates themselves, or for other teachers interested in environmental education.

When carrying out the balance of this semester, it was recognized that the dispersion of the collective and the lack of theoretical depth, both identified as gaps in the discipline conducted by trial-and-error, were practically resolved. That is, although the work was carried out by everyone, articulating theories of teaching and environmental education with pedagogical practice, it cannot be said to have reached fullness, as there are always moments of long-winded discussions and / or lack of engagement. Thus, the experience through a project involving the whole class seemed to be a very eloquent way of teaching and learning Didactics.

Although full of positive aspects, capable of demonstrating the educational quality of collective work, there was still the feeling (one more non-academic word) that the internal struggle for the renewal of Didactics had not been fully won. There was still "to go further" - without knowing exactly what that meant, until I found, in text, Rubem Alves.

The Joy of Teaching the Unknown

But the Master does not restrain himself and searches, on the back of his disciple, foreshadowing wings - wings that he imagined he saw as a dream, inside his eyes. The Master knows that all men are winged beings by birth, and that they only forget their vocation by heights when bewitched by the knowledge of things already known. He taught what he knew. Now it's time to teach what you don't know: the unknown. (ALVES, 1994, p. 73).

After the balance of experiences with Didactics through trial-and-error and collective work, having identified positive aspects and some gaps not covered, the initial concern still remained: how to achieve the ideation of transforming Didactics, overcoming its old good teaching stigma?

I started planning the second semester of 2019 by recalling the previous ones, recovering, in addition to the experiences already outlined in this article, the good university classes in Didactics, in which we studied texts, developed lesson plans and students rehearsed

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their teaching from the lesson plans. produced by themselves, in an allegorical scenario of teaching to students that exist only in fiction - after all, the rehearsal is done in class, with the presence of licensed colleagues and the teacher teacher.

There was something missing, which was not found by the theoretical classes, by the scattered trial-and-error projects, nor by the collective grouping around a school challenge. Hence, immersed in readings on education, school and teaching, here comes Rubem Alves (1994), with his perspective on the "Joy of Teaching" - a book of chronicles. In that work it was written that "being a master is this: teaching happiness" (ALVES, 1994, p. 9). But, the author would encounter obstacles imposed by the teacher himself, who, too busy teaching school things, could not teach happiness, as he should pass lessons in Science, History, Literature and so on. Sadly, he also found that, as a child, he preferred a stomach ache or a cold, because "the disease gave us an acceptable excuse for not going to school" (ALVES, 1994, p. 12). This, at times, seems like a complex project designed to not be pleasurable, fun or happy - something very similar to what was reported in an acid way, at the same time subtle, by Harper *et al.* (1980), when advising "Care, School!".

Among the various school processes neglected by dysentery, Rubem Alves (1994) identified one to name as the danger of teaching: the focus on the past, that is, on the legacy of wisdom left by previous generations that become the most important thing to to be learned (or decorated, or remembered, in short, reproduced at some point in the form of revealing to have been appropriate, even if only momentarily). This habit of valuing such assets was understood by Rubem Alves (1994, p. 70) as a very hard way to make students fail to realize that "their destiny is not the past crystallized in knowledge, but a future that opens up as emptiness, a non-knowing that can only be explored with the wings of thought". The author failed to include teachers in this assertion, to whom such schism with knowledge of the past also mows the metaphorical wings of thought.

Thus, considering the experiences with the Didactics discipline already outlined, confronting them with such clarifications about a school that strives to become a place of contempt, it seemed the time, then, to experience the axiom of Rubem Alves: teach what you don't know.

Of course, this idea sounds paradoxical, since it tends to check the more consolidated meaning of the act of teaching, technically understood as postulated by Nérici (1995, p. 100, emphasis added): "the word *teaching* has its origin in Latin, *insignare*, that is *to lecture about what others ignore or barely know*". Or, in a more popular way, teaching can be understood as 'passing on or transmitting theoretical and / or practical knowledge'. After all, it is not possible to pass on or transmit knowledge that you do not have. But this is exactly where the author's ideation is sustained: to teach something that is not known, it is necessary not only to admit ignorance, but to be willing to place yourself as an apprentice in a context where you present yourself as a preceptor. Would such a nonsense be possible? If possible, would it be desirable or necessary? In order to calm such concerns, it was necessary, therefore, to experiment.

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Thus, when the new semester began, with the Didactics II discipline, in the same class of Pedagogical Training, I was able to share this intention with already known students, who had participated in previous proposals regarding a reformulation of Didactics itself. This situation, therefore, became great for this daring endeavor to teach what is not known. We discussed the chronicles of Rubem Alves (1994), reflecting on the joy that the author insisted on as necessary in school education. The reflection was so great, that we produced our own "School Chronicles" (FORTUNATO, 2019d), in which were present elements that configure this school's potential treat.

However, the production of chronicles, although it was something healthy for teacher training, making memories of the school recovered (expanding the institution's own meaning as a place for human development), was not yet configured as a pedagogical work, in which taught what was not known. It was necessary to go much further.

Thus, as shared the concerns apprehended with Rubem Alves (1994) regarding the absence (but potential presence) of joy at school, a very favorable argument was constructed in favor of the expression of common use *carpe diem*, understood as something of *seize the moment*. It was noticed that Georges Snyders (2001) had also argued in favor of an education, in which the construction of a hypothetical future mattered less than the good enjoyment of the moment lived. For this reason, he wanted a school in which joy was a central element.

Between the joy and the quest to teach something unknown - trying to imagine how it would actually be configured in a Didactics discipline - we had a very simple, yet complete and complex idea, which reached the center of all these questions: the production of a vegetable garden on the campus itself. Historically, the institute had already developed community garden projects, having been restarted more than once. However, working on land preparation and planting, this time, would not have its more common sense of "didactic material" to deal with issues related to food, Environmental Education and Biology or socioenvironmental responsibility (COELHO; BÓGUS, 2016; OLIVEIRA; PEREIRA; PEREIRA JR., 2018). Planning, developing and seeing produce a vegetable garden on the campus soil would be a subtle way to develop knowledge of Didactics.

After all, in this Didactic class, there were no notebooks or dense texts to read and discuss. On the other hand, as the compacted earth was being prepared with hoe blows or we left the campus in search of organic matter, we talked so much about the evident meaning of the thing: collaborative work, common goals etc., but we also looked at this exercise as an eloquent metaphor in which we could think of the relationship between the ideal planning and the concrete environment - understanding the initial plans to set up a vegetable garden as the moment that precedes an academic year, for example. Hence, the hardness of the soil, the organization of the physical space in conflict with its use by other people for other purposes in other shifts, the lack of adequate equipment and materials, and so on, demonstrating how much planning needs flexibility to adapt the expectation with reality.

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As the semester unfolded, the metaphorical activity unfolded even more, as more elements emerged as the heavy work progressed. The students asked about the future of the garden, asking about its maintenance in the coming semesters and, mainly, who would serve the food products that sprouted from it. Similarly, we talked about the teaching work that also falls within this same perspective: the future of students. After all, the school always projects the future, thinking about how the baby, in the nursery, needs to be prepared for literacy, the child, in the first years, needs to know how to read, write and do math to prepare for the next stage, which will give you a solid foundation for high school, which will be essential for entering good college, and so on. Snyders noted (2001, p. 32-33): "the school as an inevitable time of preparation, waiting, a means of winning later - without worrying more about the meanings experienced or not experienced in the present".

As the metaphor unfolded, the process of trying to set up the vegetable garden on campus became more interesting, as it made it possible to discern fundamental aspects of the school as a place of "preparation, waiting and a means of winning in life", at the same time that this was happening. it made it distressing and motivating. It was distressing, because it felt that without the clear future of the garden, there was no point in letting go of all the effort. Motivating, because it helped to focus on the present, besides, of course, providing a whole learning about something unknown to most of the class (including me), which was the management of the land in order to make it fertile.

Thus, we experienced a very intense semester, in which, for the first time, I was able to experience the idea of teaching the unknown. When it all started, I knew nothing about setting up a vegetable garden, especially on arid land, which was practically lifeless. But, as the weeks went by and the seeds scattered over the land that we collectively broke, aerated, irrigated and fertilized were coming to life, learning also developed. Quick, even, allowing to see, similarly, the *meaning of school*. The understanding of such a sense being the main purpose of Didactics – at least I believe so.

At the end of the term, we got together to talk about the experience. The sense of activity was well captured by the students who, in the end, felt involved in the whole process of learning to be a teacher through the garden metaphor. For some, however, something usual was missing: theory. It was felt that the collective, manual, outdoor work was something fascinating, but without reading the texts and the notes in the notebook, a gap seems to have been created, which the hoe empiricism was not able to fill. This sincere outcome, I believe, was only achieved by the collective maturity created by the exercise – concrete and symbolic – of working on the process of teaching and learning Didactics due to the risk taken when taking the path of the unknown.

Thus, in the balance between the gaps left by the theory not broken down and the exploits of the garden-as-a-metaphor-of-school, the semester ended as something very positive, despite this daring to take the risk of teaching the way, that is not known.

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Partial Considerations of a Perennial Work

But the ideal is for the school to prepare me for life. Discussing and teaching current problems. And not giving me the same classes that they gave to my parents. (Gabriel the Thinker, Wrong study, 1995).

The verses of Gabriel, the Thinker, reproduced in the epigraph, sung a quarter of a century ago, denounce a problem of the school. This same problem was reported by Freinet (1975) more than half a century ago, inferring the school's persistence in its old methods. Something similar is also expressed in Paulo Freire's "banking education" (2011). As time goes back, considering ancient writings as if they were in the present time, we have seen very similar criticisms. One can cite the report by Francisco Alves Mourão (1936, p. 11), in which the traditional school is considered a synonym for "mere instruction", being pointed out as incapable of "preparing for the practical life of our time". Or, still, the arguments of Melquíades Pereira Junior (1934) regarding factors that delayed the implementation of a renewed education, capable of overcoming traditionalism. The problem, he said, was the old educators who did not want to change.

Now, almost a hundred years have passed, which leads us to infer that the new ones became old and the perpetual motto of traditional education, centered on the contents that the teacher must pass on, remained unchanged. We have other guises, of course, but always with the discourse that there is a revolutionary education to come. The same discourse since Pereira Junior (1934) or, as I dare say, since much earlier.

Similarly, it seems that Didactics has also suffered from a certain feeling that it needs to be renewed, but it has not been renewed because of the old ones, recursively for at least four decades, as outlined in the introduction of the article. It follows from this that it is not a kind of ill will of the oldest (since they were new at some point), but of much more intricate circumstances that maintain the status quo of school education stuck in its elementary traditionalism.

The effort given in this article was to recapitulate the pedagogical work itself, developed as a teacher teacher over approximately a glossary as a teacher of Didactics in initial teacher training courses. Thus, I revisited three unique experiences that were (de) organized from the aspiration to do differently. Thus, in each revisited discipline, it seemed that something was missing: when working on experimental groping, the lack of a more secure control of collective learning and effective treatment of the theory was felt. Such shortcomings, then, sought to supply in the realization of a joint work, organized from a common axis, which was analyzed in theory as it was prepared for the execution of a set of pedagogical activities aimed at environmental education. In this second experience, the lack of an even greater challenge was noted, as the situation was controlled by knowledge and practice with the subject.

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The third experience, named as *the joy of teaching what is not known*, started from the ideas of Rubem Alves (1994) to try to organize a Didactics discipline in which its content would be worked metaphorically from something that was totally unknown to me: the construction of a vegetable garden, in all its stages. As a balance, at the end of the process, although the joy in the educational process was experienced and the essence of the moment was understood, the lack of a more methodical work of theoretical systematization was perceived.

This moment of completing the writing coincides with the replanning phase of the Didactics discipline, for a new semester. Thus, any exercise developed to recover, describe, analyze and identify its most assertive and restrictive aspects must be taken into account in this new restart. Thus, we have some examples listed of how it is possible to diversify the teaching of Didactics. We also have a description of its weakest points within the teaching and learning process, which should be taken into account, if they are taken as a reference for pedagogical planning.

But, in the end, what is actually expected is that none of these experiences will just be taken as an example or counterexample, as right or wrong, as revolution or frustration. It is hoped that, when scrutinizing these experiences, we will have important elements to think about the meanings of teacher training in the light of a very old, yet vicious, discourse that education must be renewed. There is no way to guarantee that this will happen by trial and error, by collective work and / or by teaching something unknown. What can be said is that, if there are no experiments in Didactics, we will continue to criticize and demand changes to the traditional method, as has been done for four, five, six, ten ... decades.

References

ALVES, Rubem. A alegria de ensinar. São Paulo: ARS Poética Editora, 1994.

CANDAU, Vera. A didática e a formação de educadores: da exaltação à negação, a busca da relevância. *In:* CANDAU, Vera. (Org.). **A didática em questão**. Petrópolis: Vozes, 1984. p. 13-24

COELHO, Denise Eugenia Pereira; BÓGUS, Cláudia Maria. Vivências de plantar e comer: a horta escolar como prática educativa, sob a perspectiva dos educadores. **Saúde Soc.**, São Paulo, v. 25, n. 3, p. 761-771, 2016.

CUNHA, Carolina Rodrigues; TERRA, Carla Nayelli; FORTUNATO, Ivan. Ateliê de Física para o ensino de termodinâmica: relato de projeto de intervenção escolar. **Revista Brasileira de Iniciação Científica**, Itapetininga, v. 4, n. 3, p. 28-39, 2017.

CUNHA, Maria Isabel da. **O bom professor e a sua prática**. 24 ed. São Paulo: Papirus Editora, 2012.

© Rev. Inter. Educ. Sup.	Campinas, SP	v.8	1-18	e022009	2022

FORTUNATO, Ivan. Práticas pedagógicas no ensino superior relato de experiências com a disciplina didática em licenciaturas. **Rev. Internacional de Ed. Superior**, Campinas, v. 6, e020039, p. 1-13, 2020.

FORTUNATO, Ivan. Ensinando futuros professores a ensinar: reflexões de uma experiência didática. **Horizontes**, Itatiba, v. 37, e019014, p. 1-19, 2019a.

FORTUNATO, Ivan. Multiculturalismo e formação docente: experiências em um Instituto Federal. **Aurora: revista de arte, mídia e política**, São Paulo, v. 12, n. 34, p. 128-142, 2019b.

FORTUNATO, Ivan. (Org.). **Educação Ambiental no Ensino Fundamental:** projeto "Iniciação à Linguagem Ambiental". São Paulo: Edições Hipótese, 2019c.

FORTUNATO, Ivan. (Org.). **Crônicas da Escola:** fragmentos do cotidiano. São Paulo: Edições Hipótese, 2019d.

FORTUNATO, Ivan. A Didática na formação inicial de professores: relato de experiência. **Revista Ibero-Americana de Estudos em Educação**, Araraquara, v. 13, n. 1, p. 269-276, 2018a.

FORTUNATO, Ivan. A formação de professores de ciências vista pela ótica da diversão: o caso do Show de Física do IFSP Itapetininga. In: CACHAPUZ, Antonio; SHIGUNOV NETO, Alexandre; FORTUNATO, Ivan. (Org.). **Formação inicial e continuada de professores de ciências:** o que se pesquisa no Brasil, Portugal e Espanha, 2018b. p. 150-155.

FORTUNATO, Ivan. Cinco anos de narrativas ficcionais para pesquisa em Educação Ambiental: um balanço dessa experiência. **Educere**, Mérida, v. 21, n. 68, p. 57-63, 2017.

FORTUNATO, Ivan. Porque precisamos de Pesquisas Ambientais. **Revista Hipótese**, Itapetininga, v. 1, n. 1, p. 6-14, 2015.

FORTUNATO, Ivan. Algumas ideias de Célestin Freinet para motivar a docência. **Direcional Educador**, São Paulo, n. 105, p. 34-36, 2013.

FORTUNATO NETO, José; FORTUNATO, Ivan. Dicionário ambiental básico: um projeto para a educação ambiental. **Educação Ambiental em Ação**, Novo Hamburgo, v. 8, n. 30, p. 1-11, 2009.

FREINET, Célestin. **Pedagogia do bom senso**. Tradução J. Baptista. São Paulo: Martins Fontes, 2004.

FREINET, Célestin. **As técnicas de Freinet da Escola Moderna.** 4 ed. Lisboa: Editoral Estampa, 1975.

FREIRE, Paulo. **Pedagogia do Oprimido**. São Paulo: Paz e Terra, 2011.

GARCIA, Tânia Maria F. Braga; SILVA, Vivian Batista da. De como ensinar: traços paradigmáticos nos manuais pedagógicos e perspectivas de investigação (1870-2015). **Educ. rev.**, Curitiba, v. 35, n. 77, p. 135-158, 2019.

© Rev. Inter. Educ. Sup. Campinas, SP v.8 1-18 e022009 2022

HARPER, Babette *et al.* **Cuidado, escola!**: desigualdade, domesticação e algumas saídas. 18 ed. São Paulo: editora Brasiliense, 1980.

HERRÁN, Agustin de la; FORTUNATO, Ivan. ¿Por qué desde la Didáctica no se favorece la formación del profesorado? **Pro-Posições**, Campinas, v. 30, e20170033, p. 1-32, 2019.

MARIN, Alda Junqueira; PENNA, Marieta Gouvêa Oliveira; RODRIGUES, Ana Carolina Colacioppo. A Didática e a formação de professores. **Revista Diálogo Educacional**, Curitiba, v. 12, n. 35, p. 51-77, 2012.

MORAIS, Bruno Rogério Ferreira de; CAMILO, Douglas Eleutério. Diálogo com Libâneo sobre didática. **Revista Hipótese**, Itapetininga, v. 1, n. 2, p. 110-122, 2015.

MORAN, José Manuel. Metodologias Ativas para uma aprendizagem mais profunda. *In*: BACICH, Lilian; MORAN, José Manuel (Org.). **Metodologias ativas para uma educação inovadora**. Porto Alegre: Penso, 2018. p. 1-25.

MOURÃO, Francisco Alves. **Relatório da delegacia do ensino de Ribeirão Preto**, 1936. [mimeo]

NÉRICI, Imídio Giuseppe. Educação e ensino. São Paulo: Ibrasa, 1995.

OLIVEIRA, Fabiane Rezende de; PEREIRA, Emmanuelle Rodrigues; PEREIRA JR., Antônio. Horta escolar, educação ambiental e a interdisciplinaridade. **Revbea**, São Paulo, v. 13, n. 2, p. 10-31, 2018.

OLIVEIRA, Luissandro; FORTUNATO, Ivan. Níveis para o domínio do RPG como um elemento didático: RPG pedagógico. (resumo) II Encontro de Práticas Pedagógicas – EPP, Itapetininga. **Anais**... 2016.

OLIVEIRA, Rodrigo da Silva. O que é o bom professor? **Revista Hipótese**, Itapetininga, v. 1, n. 3, p. 175-192, 2015.

PEREIRA JR., Melquíades. Fatores de retardamento da vitória completa da Escola Nova. **Revista de Educação**, São Paulo, v. 5, n. 5, p. 156-159, 1934.

PIMENTA, Selma Garrido; LISITA, Verbena Moreira Soares de Sousa. Pesquisas sobre professores e sua formação: uma análise de pesquisas desenvolvidas no programa de Pós Graduação da FEUSP — 1990 a 1998. **Educ. rev.,** Curitiba, v. 24, n. 24, p. 87-109, 2004.

REIGOTA, Marcos. **A floresta e a escola:** por uma educação ambiental pós-moderna. São Paulo: Cortez, 1999.

SNYDERS, Georges. **Alunos felizes:** reflexão sobre a alegria na escola a partir de textos literários. 3 ed. São Paulo: Paz e Terra, 2001.

SILVA, Carla Nayelli Terra; CUNHA, Carolina Rodrigues. Algumas ideias de Freinet para a educação. **Revista Hipótese**, Itapetininga, v. 1, n. 3, p. 167-174, 2015.

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Report Experience

TEICHNER, Otávio Telles; FORTUNATO, Ivan. Gamificação aplicada ao plano de aula: elementos para potencializar o ensino. **Revista Eletrônica Científica Ensino Interdisciplinar – RECEI**, Mossoró, v. 3, n. 9, p. 380-386, 2017.

TEICHNER, Otávio Telles; FORTUNATO, Ivan. Refletindo sobre a Gameficação e suas possibilidades na educação. **Brasileira de Iniciação Científica**, Itapetininga, v. 2, n. 3, p. 102-111, 2015.

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