ZETETIKÉ

(De)formation of teachers and what can portfolios do in producing differences in shifting identities

(De)formação de professores e o que podem portfólios na produção de diferenças em identidades movediças

Vinícius Sanches Tizzo[1]

Ana Claudia Molina Zaqueu Xavier[2]

Heloisa da Silva[3]

Abstract

This article addresses aspects of the formative process of (mathematics) teachers and actions aimed at it based on the notion of *deformation*. For that, some concepts of the philosophies of difference are operated, relating this notion to the idea of *becoming* a teacher. Among other problematizations, the following question is asked: Which practices are potent for a process of *reterritorialization* of teacher training, which promote decentering and detachment of "being" and make a *becoming* teacher (of mathematics) emerge? Based on trainers' narratives about their work with a portfolio in the training of future teachers, we sought, from a cartographic perspective, an analysis of the potential of this resource for problematization of affectations that help to compose teaching in the becoming.

Keywords: Math education; (Math) Teacher education; Becoming Teacher; Narratives.

Resumo

Este artigo aborda aspectos do processo formativo de professores (de Matemática) e de ações voltadas a ele a partir da noção de *deformação*. Para tanto, operam-se alguns conceitos das filosofias da diferença, relacionando tal noção à ideia de *devir* professor. Dentre outras problematizações, questiona-se: Quais práticas mostram-se potentes para um processo de *reterritorialização* da formação de professores, que promovam descentramentos e desapego do "ser" e façam emergir um *devir professor (de Matemática)*? Com base em narrativas de professores formadores sobre seus trabalhos com portfólios na formação de futuros professores, buscou-se, sob uma perspectiva cartográfica, uma análise do potencial desse recurso para problematizações de afetações que operem junto à composição de uma docência em *devir*.

Palavras-chave: Educação Matemática; Formação de professores (de Matemática); Devir docente; Narrativas.

[1] PhD and Master in Mathematics Education from the Universidade Estadual Paulista (UNESP). Professor of Higher Education at the State University of Minas Gerais (UEMG), Brazil. E-mail: vinicius.tizzo@uemg.br. ORCID: https://orcid.org/0000-0002-5390-9141.

[2] PhD and Master in Mathematics Education from the Universidade Estadual Paulista (UNESP). Adjunct Professor at the Federal University of Uberlândia (UFU), Brazil. E-mail: ana.zaqueu@ufu.br. ORCID: https://orcid.org/0000-0001-9057-4435.

[3] PhD and Master in Mathematics Education from Universidade Estadual Paulista (UNESP). Assistant Professor at Universidade Estadual Paulista (UNESP), Brazil. E-mail: heloisa.silva1@unesp.br. ORCID: https://orcid.org/0000-0002-6025-3275.

Introduction

A scruffy monk said to me on the way:
"I wanted to build a ruin.
Although I know that ruin is deconstruction.
My idea was to make something in the manner of a tapera.
Something that would serve to shelter abandonment,
as taperas do.
Because abandonment can be not only a man under the bridge, but also a
cat in the alley, or a child trapped in a cubicle. Abandonment can also be of
an expression that has gone archaic, or even of a word.
A word that is without anyone in it.
(The monk's eye was close to being a corner.)
He continued: let's say the word LOVE.
The word love is almost empty.
There are no people in it.
I wanted to build a ruin for the word love.
Maybe it would be reborn from the ruins, like a lily can be born from a
dunghill.
And the monk fell silent, disheveled.
(A ruína, Barros, 2010, p. 385).

In this text, we talk about teacher (de)formation. It is a brief outline of ideas, problematizations and concepts that have been forming, deforming and, in a certain way, motivating us along our research paths. They are introductory notes about what has provoked us, in a very powerful way, to think and problematize aspects that involve processes of teacher education and actions in environments focused on these processes. How can we invent new forms of action aimed at teacher training without abandoning everything we already know and, at the same time, exercise an approach of the subject in training as happening instead of existence, as becoming instead of identity, as one who builds places instead of one who inhabits spaces previously invented by others? What concepts, either the ones we already operate or the ones we see potential to operate, can serve as possibilities of encounters with other experiences in terms of teacher education processes? These and other questions, as well as the notes we bring in this article, are the result not only of intentionally organized encounters, in research and in research group meetings, but also of encounters that took place unpretentiously, by chance, in ordinary moments of personal or professional daily life, in the university and outside it.

In the following notes, we indicate the place from where we speak, how and from which dimensions we have conceived and problematized the process of Mathematics teacher education and actions focused on this process, concepts with which we have operated on this process and, finally, a reading, from a cartographic perspective, of the trainer's narratives about working with portfolios in processes focused on the education of future teachers. In this movement, we intend to analyze the potential of the portfolio as a place of production of affections to compose a teaching in development. The narratives about portfolios analyzed come from the doctoral research of Tizzo (2019) and Zaqueu-Xavier (2019), who

investigated the mobilization of narratives in Teaching Initiation Programs - Pibid[4] .

Reterritorializing (Mathematics) teacher education

As participants of the research group Oral History and Mathematics Education - Ghoem, we have been led to explore and travel through characteristically dynamic maps, which allow understandings about the performance and training of mathematics teachers in Brazil - understandings that are never definitive about training instances, training institutions, ways of considering or subverting legislations, among other aspects, which encompass historiographical researches on the theme (Garnica, 2014). Among the possible understandings, based on an analysis of research results of the Mapping project,[5] Gomes (2014) highlights that the geographical, historical, economic, political and sociocultural diversity of Brazil's spatiality and the historical dimensions of the training of mathematics teachers in this country have pointed, for some time, to the inexistence not only of a single identity for the mathematics teacher, but also to the incongruence between equality of conditions and inequality of opportunities regarding the particularities involved in the training processes. The author also points out that, although there are important contributions of research in the area dedicated to investigating ways in which mathematics can be taught in a more meaningful way in schools, through "more knowledge and reflection" by teachers, the research of the Mapping project suggests that there is no question of thinking about the training of mathematics teachers in a generalist way in our country, as if the teacher had a unique and legitimate configuration in all times and spaces.

In addition, and seeking to explore and experiment the treatment of these two aspects - that of diversity and that of the historical dimensions involving the education of mathematics teachers in Brazil - in environments aimed at the education of future mathematics teachers, we have, in the same research group, investigated the potentialities of (historical) narratives about cultures of mathematics and mathematics education in these

---

[4] The Institutional Program of Scholarships for Initiation to Teaching (PIBID) is focused on formal teacher training, implemented in 2007, by a joint initiative of the Ministry of Education (MEC), the National Fund for the Development of Education (FNDE), the Secretariat of Higher Education (Sesu) and the Coordination for the Improvement of Higher Education Personnel (Capes). Its first call for proposals was exclusively for Federal Institutions of Higher Education and Federal Centers of Technological Education that offered full degree courses, that had satisfactory scores in the National System for Evaluation of Higher Education (Sinaes) and that had signed agreements or cooperation agreements with the public Basic Education network linked to Municipalities, States or the Federal District. Currently, after numerous structural and even intention changes, higher education institutions of all kinds (public, private, philanthropic, etc.) and undergraduate students who have not completed more than half of the course in which they are enrolled can participate in the Program.

[5] Ghoem's project, entitled "Mapping the Training and Performance of Teachers who teach/teach Mathematics in Brazil", which has been ongoing since 2002, involves historical studies on the training of teachers who teach/teach Mathematics and their practices in Brazil. As Garnica (2014) states, it is a kaleidoscopic project due to its frequent reworkings in subprojects of the group, depending on the space, context, historical moment, sociocultural group on which the researchers act; it manifests itself as a game of scales, that is, changing the perspective, from near to far, from focused to panoramic, from inside to outside and vice-versa, constituting, always, new scenarios. Besides, it has the character of investigative continuity, theoretical-methodological flexibility, and collectivity.

environments. Among the crossings that the work with these types of narratives has provoked, we highlight their potential to problematize epistemological, social, ethical and political issues and their differences[6] for the decolonization of/in teaching and learning environments that consider the diverse Brazilian spatialities[7].

This research movement and its results have continuously affected us, allowing us to create other ways of perceiving, thinking and practicing (Mathematics) Teacher Education. About being formed, we have understood that the daily encounters in the various spaces we occupy and the narratives we produce about ourselves and about others from these spaces constitute selves that are continuously prepared to reinvent themselves, characterizing such process as something always inconclusive, in an incessant, provisional and contingent movement of forces in action - forces of various orders and dimensions. In other words, we can say that subjects are constituted, over time, through encounters and their agency, from actions in certain situations, circumstances, and materiality in a constant historical process. As Hall (2000, p. 109) has argued, the formation of identities and subjectivities arise from the narrativization of the self, and "the necessarily fictional nature of this process in no way diminishes its discursive, material, or political efficacy," even if that sense of belonging, that is, the "suturing to history" from which they arise, is, in part, in the imaginary and, therefore, constructed in fantasy. This is why the verb "constitute" can be considered exaggerated, since subjects are not and never will be constituted. Evidently, at this point, we are talking about an apprehension that seems common to us when employing this term, since we understand that the verb does not carry in itself a finalist perspective, but its use can make it so.

In this way, the process of formation is always "being" and in constant movement, complex and multiform transformation, that is, it is nothing more than a succession of affects and impressions and nothing more than an unstable configuration of instincts that prevail at certain moments. It may even be that, due to this dynamic character, the formation process resists a reductive and simplistic explanation. In this sense, daily, social, and material activities should not be ignored when we consider the role of the teacher and the possible limits of his or her responsibility in the teaching and learning processes. According to Rocha (2015), by adopting this perspective, a possible way out for the processes focused on training

---

[6] Such narratives are not limited in themselves, but compose a world when they are taken in their singularities, that is, when the marks that can produce something are problematized. By this, we do not mean that it is necessary to ignore the similarities, but to provoke the perception that the difference, the singular, can create disarrangements that have the power to originate other disarrangements. As an illustration, we can think of the following metaphor: a screw can be just a screw, but depending on the relationship that is established, it can create worlds, it can become peace, joy, sadness, even God. Difference is productive, that is, it produces (pre)concepts, names, (new) differences, singularities, effects, patterns, models, and rules of action. Difference is a process of subjectivations, since it teaches ways of being and acting (Marcello, 2004).

[7] We have meant decoloniality as a way of being/being/populating the production of self and of the world, in which hegemonic, hierarchical visions/actions, relations of oppression, denial of individuals and forces, which say of a logic of coloniality, are problematized and demystified. By opting for a decolonial stance, we assume the negation of territoriality, we problematize the naturalized and defend difference, subjectivity. Working with decoloniality is not only about a way of resisting, but above all, about a way of (re)creating paths in which it is possible to perceive elements that were "invisible" before, to become aware of affects and affections and allow oneself to create other places of production and (re)construction of alter-(n)actives (Wash, 2013).

is to promote encounters with a view to experiences in which subjects can transform and be transformed, amid the constant clash with circumstances.

It should be added that such transformations may imply in the understanding of the existence of spaces of not knowing, that is, spaces that do not keep explicit relations with what is already known. Spaces in which knowledge can be constituted by means of affections. However, it is not a matter of denying a formation that takes into consideration the work with historically constituted knowledge, but of provoking us to be/feel/perceive beyond the given fact, the established, the instituted, and to exercise a search in the unfolding of our daily lives, of a possibility of formation that has the potential to deal with what is inconstant, a possibility that understands formation and transformation in a non-exclusive way, but as dimensions that can intertwine, interact, and dialogue.

From this point of view, the teacher education process can be configured as a rhizome, that is, as something that does not have a fixed root in a determined point, but has a wide range of ramifications, without beginning or end and, nevertheless, always growing and overflowing. To understand and propose teacher education processes, as rhizomatic processes, is to seek and open to permanent transformations, to multiplicities, to the shifting, to innovations that are not restricted to the unprecedented, but that bring vitality to the process.

When we take into account this perspective on training, the processes aimed at teacher training cannot be seen as archaic teaching processes in which the trainer talks or tries to transmit a certain concept so that the teachers in training can incorporate it[8]. We notice that this way of proceeding, based on the transmission of knowledge, focuses on the teacher-trainer and sees this professional as if he/she had an ability that allows him/her to pass on knowledge directly to the students. This way of understanding is related to the field of representations, in which there is a ready-made knowledge and the teacher-in-training needs to appropriate this knowledge.

Still from the perspective of training as a rhizome, we understand that in the actions directed to this process, neither should we exclusively exercise the possibility of building a training that focuses not on the trainer, but on the teacher in training. In other words, that teacher education is a space where (future) teachers have the possibility to get in touch with the object of study and take, manipulate and experiment with such object and that, in this context, the teacher trainer has the role of mediating or facilitating the process of knowledge construction. Based on Josso (2004), we note that learning can be characterized by a process

---

[8] At this point, we make a distinction between the terms archaic and traditional. We chose to refer to an archaic process of teacher education, because we understand that archaic is related to what is, in a way, outdated, something that no longer has a place, because it is anachronistic, out of time and not applicable. The term traditional, on the other hand, can be something that still exists with vitality, that has its place and importance in the teacher education process. By this, we mean that the work with teacher education is not permanently revolutionary, nor does it aspire to constant renewal. In working with teacher education, we are dealing with the infeasibility of exploring what is archaic, that is, structures that are outdated in this process. However, we do not aspire to deal with changes on what historically presents itself as vitalized.

in which a given subject seeks to understand the reality in which he lives and himself, through his own competence of perception and cognition, which is given by his intentions, interests, desires and choices. In this sense, according to the author, all learning involves changes, displacements, retakes, re-significations, and possibilities of ruptures, in which the result of this process, the learning, can be configured in what the author characterizes as the incorporation of knowledge and actions, in intellectual, cognitive, psychomotor, psychosocial, and cultural instances, as relatively integrated dimensions, which implies an infinite impossibility of completion. Or rather, learning can be a persistent exercise of exposing the subject to encounters and not limited to an object of study, which does not even exist as something ready-made, outside the subject and not only within him/her.

We introduce this text with the indication of the place from where we speak and with this problematization, because, both in the understanding of teacher education, as a generalized possibility of transmission of certain knowledge, or groups of specialized knowledge, and in the understanding that this same education constitutes, also in a generalized way, a construction, the purposes of these two modes of action in education seem to approach each other in a very close way. That is, in both transmission and construction, the goal seems to flirt with the idea that actions aimed at teacher training require accumulation of knowledge.

We also observe that the distinction between formative processes, as being by transmission or by construction, seems to be related to the ways in which the learner, or the teacher in training, became knowledgeable about something. Once this distinction is understood, the process of "forming teachers", based on these two perspectives, is thus exclusively related to a process of communication and dialog, in which learning or becoming a teacher is to dialog, that is, to constitute a collective, even though the word may not be exhausted in the relationship between the one who "speaks to" and "who hears from". This process may also presuppose, as Paulo Freire (1987, p. 91) praised, the "meeting of men, mediated by the world, to pronounce it, not exhausted, therefore, in the relation I-tu". According to him, "dialogue imposes itself as the path through which men gain meaning as men. For this reason, dialog is an existential demand" (Ibid). Dialog includes, in this sense, many "I's" and many "Thus's", therefore, it is no less than the outcropping of the "we". Of course, we are touched by this and agree that communicating or dialoguing is one of the aspects that involves teacher education, but it is not exclusive.

When we deal with teacher education in a submerged way and limited to the communicative plane, we stifle a dimension where the world is made and produced, which is the field of intensities and that involves diverse materiality (human and non-human), that is, encounters in circuits that make it possible, from and through affections, to produce territories of senses, of new meanings. In the words of Deleuze and Guattari (1995, p. 72), an intense molecular life, not stagnations and identities, a line that is "more malleable, not less disturbing, much more disquieting, is not simply interior or personal: it also puts all things into play, but on another scale and under other forms, with segmentations of another nature,

rhizomatic instead of arborescent[9]" . Communication seems to be a little more stuck on the established, thus leaving aside the vibrancy, the intensity, the passion and the affections. When you fall in love, you don't fill out a checklist. When you fall in love, something that is not necessarily instituted happens and takes shape or not. If it takes shape, of course, one lives the intensity. Within formative processes, especially those formally instituted, one tends to leave out this field, which can be called the field of intensities that produces the world in the process. This field, in turn, is characterized by encounters in circuits involving humans and non-humans in/with entanglement, and are not reduced to an I-tu relationship, nor to subject-object relationships, or "between" relationships, because they are encounters in which language is not an essential determinant.

Next, we will discuss some concepts relevant to the configuration of the teacher education process as rhizomatic, and then problematize them together with the mobilization of portfolios in mathematics teacher education processes.

Problematizing: rhizome, affections, smooth and striated spaces, becoming...

Although the possibility of a categorical definition of the idea of problematization is uncertain, since this perspective retains a polysemic character, which often reflects a singular meaning that depends on the moment of its emergence, for us this term signals, in a powerful way, more an investigative gesture than a methodology. Problematization here is aligned with a way of proceeding in front of a research object, with the purpose of promoting a work of thought that does not aim to follow a set of procedures and thoughts that are able to lead the researcher to a truth. By problematizing, we intend to suspend certain certainties and absolute truths, to signal a path in the uncontrollable direction of the production of the new. An infinite exercise of transgression in relation to the prevailing order (Vinci, 2015). It is an investigative gesture, like the one proposed by Foucault (2010, p. 233), when interested in the history of thought: an investigative gesture is interested in converting that "which made possible the transformations of the difficulties and obstacles of a practice, into a general problem for which various practical solutions are proposed." More than simply translating or manifesting these difficulties, problematization requires elaborating, for its proposals, the conditions under which possible answers can be given and also defining the elements that will constitute what the different solutions strive to answer[10].

How to characterize non-hierarchical formative processes, deterritorializing knowledge "always there" and resistant to certain power practices? In contrast to a hierarchically shaped process, like a tree with branches, a rhizomatic formative process seems to allow such a characterization. According to Deleuze and Guatarri (1995, p. 25), authors of

---

[9] Arborescent, for Deleuze and Guattari (1995), a remissive and essential model.

[10] We emphasize that it is in our interest to problematize notions dear to our investigations, because they support us in understandings and in our expressions about processes of mathematics teacher education. Moreover, it is in our interest to make explicit our instruments of speech.

the notion of rhizome, it "has no beginning or end; it is always in the middle, between things, interser, intermezzo. Rhizome is something that does not have a fixed root in a determined point, on the contrary, it has a wide range of ramifications that always grow and overflow. Being more than a static set of previously established processes, a rhizome is configured in a wide arsenal of possibilities that are uninterruptedly under construction, like a living organism, in which there will always be a place to grow, overflow, and coin new meanings. Possibly, because of the interest in a theorization of educational processes that would characterize them in a sufficiently open and multiple way, such as that proposed with rhizome by Deleuze and Guatarri (1995), a significant number of works in educational philosophy have been based on this notion. "According to this view, systems of education and subjectivities emerge and interact through discontinuities, rupture, and multiplicity in a vast interleaving of rhizomatic assemblages" (Freitas, 2012, p. 557).

On affect, Deleuze (2019) problematizes:

> [...] because it is called affection to every manner of thought that does not represent anything. What does this mean? Let us take at random, no matter what it is called an affection or a feeling: a hope for example, an anguish, a love, which is not representative. In this there is well an idea of the thing loved, there is well an idea of something promised, but hope as such or love as such represent nothing, strictly nothing.
> Every mode of thought while not representative will be called affection. A volition, a will, implies, strictly speaking, that I want something; what I want is the object of representation, what I want is given in an idea, but the fact that I want it is not an idea, but an affection, because it is a non-representative mode of thought (Deleuze, 2019, p. 35).

By using the word "affection" and its derivations, we are referring to the action between-bodies, between-subjects, at the moment they meet. They are "flows that drag each of these bodies [subjects] to other unseen places: a becoming [...] are true chains of deterritorialization" (Rolnik, 2014, p. 57). For Deleuze (2019, p. 41), starting from the problematizations triggered by Spinoza's reflections, affect is composed by a non-representational mode of thought, it is about the "continuous variation of the force of existing insofar as this variation is determined by the ideas one has."

How to explore and say about spaces, lines, directions, and dimensions, which directly and indirectly imply in the formation of mathematics teachers? In this text, we rely on the notions of smooth and striated spaces, following the thoughts of Schneider (2013), understanding that in the process of teacher training there are different forces, interests and desires in tension and, an example of this, can be observed between the logic of the teacher trainer and that of the student in training. Between these two actors in the formative process, spaces, perspectives, interests and subjectivities are superimposed, which inevitably end up placing teachers and students in fields that can be close or opposite, between respect and belief in the rules defined by the formative institution or indiscipline and the search for breaking hierarchies. These issues, present in the school daily life, are mixed with issues of a sociocultural nature that are engendered in the experiences of the subjects in and from the institution. Directly or indirectly, these dualistic ways of situating the roles of the subjects

and the rules at the university correspond to the distinction that Deleuze and Guattari (1995) construct when working on the power relations present in society, about the concept they identify as striated space and smooth space.

> Smooth space and striated space - nomadic space and sedentary space - the space where the war machine develops, and the space instituted by the state apparatus - are not of the same nature. Sometimes we can mark a simple opposition between the two types of space. Other times we must indicate a much more complex difference, which causes the successive terms of the oppositions considered not to coincide entirely. Still other times we must remember that the two spaces only really exist thanks to the mixtures between them: the smooth space does not stop being translated, transverted into a striated space; the striated space is constantly reversed, returned to a smooth space (Deleuze & Guattari, 1995, p. 147-148).

The striated spaces are segregated, identitary, fixed, with well-defined divisions and partitions, flags and coats of arms; whereas the smooth spaces are characterized by movement, by the union of subjectivities, by flatness. For Deleuze and Guattari (1995), these spaces are susceptible to change, that is, a smooth space can be transformed into a striated one and vice-versa, as well as both spaces can coexist in the same locality, as lines of force, fluxes, because "even the most striated city secretes smooth spaces: inhabit the city as a nomad, or troglodyte. Sometimes movements, of speed or slowness, are enough to recreate a smooth space" (Deleuze & Guattari, 1995, p. 189). We take the terms striated space and smooth space to provoke a clash, however, not in the usual sense of one against the other, but in the sense that for one to exist it depends on the existence of the other, the two, striated and smooth space, operate together. Smooth and striated space are not, therefore, independent: one exists with - and in function of - the other.

(De)formation of teachers

Figure 1: Work by South African artist Pamela Phatsimo Sunstrum (Parable, 2016), in the exhibition "Still HereTomorrowTo High Five You Yesterday".
Source: Zeitz Museum of Contemporary Art Africa in Cape Town - South Africa (2019).

ZETETIKÉ

With the expression **(De)formation of teachers,** we want to defend a way of understanding the process of teacher education as a movement that can slide from essence, from definition to potency, as a plural becoming. Pamela Sunstrum's drawings (Figures 1 and 2), which we bring as epigraphs to this and the next topic, provide some of this idea of movement or, according to the artist, of many times in a single moment, besides how she also lets a transformation transpire through the landscape. In her words, "those so many legs or so many arms, on the one hand, can be this physical mutation, this monstrous body, but it can also suggest seeing a body in motion in discrete gestures" (Sunstrum, 2020).

Although we recognize that different meanings can be attributed to each word, depending on the context or the reader who observes it, talking about (de)formation also has to do with our intentions to expose a certain discomfort that some words related to actions for teachers' professional development cause us. We can take as an example the word "formation", which explicitly brings the idea of form, of training according to a previously established model, and if this expression is linked to the adjective "superior", we feel sick to our stomach. Superior formation, to us, said in this way, induces a certain class stupidity and prejudice. Words have this power (Queiroz, 2015).

With these considerations, we do not categorically aspire to state that the teacher in training cannot create, search and deepen in a new theme. These actions are not denied to him/her. But the willingness of teachers in training to expose themselves to a creative process happens in very limited moments. Commonly, in a graduating class, teachers insist that students learn to manipulate objects that have been previously established, for example, by the curriculum or by the program of a discipline. We understand that clinging exclusively to such external planes of references limits the openness of the subjects involved in the formative process to experiences, affections, intensities, and blocks are established.

We argue that the learning process in a teacher education scenario can go beyond dialogue. In this process, one seeks to unsettle the language and the world, that is, to give vent to the affections that are produced in the encounters. It is clear that we can go deeper into the discussion about dialog and understand that it is also the production of language that is alive and produced in everyday life. But, when we talk about dialogue, we refer to the rigidity of this communicative field. We want with this text, among other aspects, to argue that training teachers is to provide opportunities to be submerged in a sea of episodes in which elements of different natures may or may not connect without any previous disposition and without any path defined beforehand.

Actions aimed at teacher education can thus be constituted, in this perspective, by moments in which real smooth spaces, without defined routes, a network without knots, without a subject and without an object overflow from this process. It is not about ignoring or deliberately insubordination to the grooves of a teacher training scenario in an institutional process that, among other aspects, involves curriculum and educational policies, such as Pibid itself, for example, but to understand that in this grooved space genuine moments of creation and affections may flow, when desires do not succumb to the restriction imposed by

the grooves. In this way, a network is configured where there is nothing more than the connections themselves and the flows resulting from them. Inevitably, such a network will produce marks that cannot be defined a priori by the trainer. Marks that figure in the order of the uncontrollable, in the sense that it is not possible to decree how these marks will be produced in each subject involved in the formative process.

Our intention, in proposing this thought, is related to the possibility of provoking questionings and displacements that problematize the processes of teacher education through a look that is not limited to automatization, paralyzing passivity and normalization. Thinking about a formation in this perspective, it seems to us that, somehow, it leads trainers and teachers, in formal formation processes, to a direction of uncertain paths, open to the sensitive, to listening, to the affections, attentive to the relations that operate through the integration of the smooth and striated spaces that overflow the process.

In this regard, Schneider (2013) reminds us that the communication between the striated and smooth spaces does not occur in the same way, even if these spaces are mixed. The educational scenario, especially the one involving the teacher training process, seems to correspond to a medium in which this complex relationship enables the communication between the two spaces, even though they paradoxically oppose and mix. That is, teacher education aggregates dimensions that weave the spaces, operating in such a way that teacher educators and teacher trainees walk through smooth and striated spaces concomitantly, and this seems to correspond to a powerful multicultural training process. Understood in this way, even if the teachers in training are subjected to a rigid discipline, in which they are systematically watched and instructed by the trainers - technicians legitimized by the institutional rules - the teacher training process sometimes enables the maintenance of marginal attitudes that may overcome the organization imposed by the training institution.

Given the above, and still thinking with Schneider (2013), the striated space, composed of the institutional scenario, which defines the guidelines and rules of the formal teacher training process, can be guided and changed according to the nature of the course. In this scenario, the curriculum of each area operates as a kind of travel map and corresponds to the tools of the striated space, which define a strategically determined path. However, even if we are aware of the streaks in the path, it is possible to maintain a space of intensities, values, and uncertain interests, which confront the streaks and overflow into smooth spaces. Understood this way, the process of teacher education is not limited or defined as a space striated by nature, since both spaces - the smooth and the striated - occur in it, and they communicate, contaminate each other, without necessarily being inserted in opposite fields. Despite the intentions of standardization and the tools of striation, which, in a certain way, dominate the teacher education scenarios, this process may remain opening possibilities for the subjects involved to operate constant (re)creations of smooth spaces. Spaces that are powerful captures - or micro captures - of the encounter with what is strange to the common, and that, thus, question certainties, reveal beauties and, in a certain way, ask: "Does this bother you? Spaces of rupture in the engendering of forces of agglomeration of intensities that are imposed by a judgment of truth that disciplines, docializes, and domesticates.

ZETETIKÉ

Thinking from this perspective, we try to approach an understanding that situates the formative process in a sort of in-between place, operating together with the affects that may emerge from this process without, however, understanding them as objects that may be pedagogized, transformed into a method, into a program, or even, into indoctrination, but effects of the subjects that, in a conscious manner of their finitude, opt to testify about them, not with the pretension of being an example, but with the desire of configuring themselves as a text to be read by the other. In this way, we seek to exercise a thought about the subject, as someone who is always inserted in a cyclical horizon, that is, in mutation and in uninterrupted re-inauguration promoted by uncertainties, which allows us to observe him as someone who can always be reinscribed in an immanent language, which glimpses the human becoming as one of the only materials of expression, which enables the approximation of what can be called life.

In other words, we could say that life is what the subject does with everything that happens to him. This understanding invariably suggests the idea that the subject can offer himself a form, his own form, a fact that establishes a certain displacement on the issue that involves the formation and, as we seek to problematize, its relationship with the affections that cross through him, because the subject, when giving himself form, carries a past that, in a way, identifies him and causes the configuration of his present when inserting him in a condition of interpreter of his past. Producing meanings for the past from the present, promoting a reading of what has already happened in a present that precipitates the future, that is, the possibility of being different, even if not in a totality, but cultivating an openness to the possibility of the uncertain. And, keeping himself open to the new and to creation, the subject ends up inserting himself in an inventive becoming, narrating himself and producing meanings for his affections, which, by no means, have to do with an absolute and definitive production, but with a production that is always ready for revisions. These productions of meanings can be infinite, precisely because each production is finite. In this sense, we think that the affections, which cross the subject, can be understood as formative events, since they expose to the subject its singularity (Souza, 2018).

Thus, learning in the midst of a formative process does not preserve a relationship with the idea of accumulating knowledge, on the contrary, accumulating knowledge can keep us away from the ability to learn, to exist, to be affected, to vibrate, and to produce. If it is seen as something to be accumulated, knowledge can even end up serving as an external reference plane that tries to mediate our affections. We understand that teacher education is dynamic and is configured as a living organism, it does not have a predetermined format, it is not static, therefore, we can talk about teacher (de)formation, since in this process the subjects make, invent, exist, construct, deconstruct, form, deform, experiment, and affect, in a continuous process of production of shifting identities. We understand that becoming a teacher can be a potentially significant process if it is a constant movement of exposing one's own body to the encounters[11]. An exercise of affecting and being affected. An exercise of

---

[11] Bringing to the scene the idea that involves the notion of body, whether our body or the other's, has to do with the ground related to sensitivities produced in "processes of subjectivation that define ways of looking, living

opening oneself to the unknown, with no certainty of the passions that may arise. In this way, teacher education can only be understood as an encounter.

Encounters in which bodies enter into a compositional relationship and expand their power to be, to act, and to think. Encounters that make transformations possible, that treat issues that figure in the order of the already known as something to be vitalized and problematized. From this point of view, the transformations can imply a certain space for not knowing, that is, an exercise, a state to be practiced that refers to the idea of suspicion, a letting go of what is known in order to experience the unknown. Encounters that arrange the bodies in such a way that they can be affected by a range of modes that tend to continuously restore the bodies involved in the process.

Seen this way, teacher education may be related to a discontinuity, or to something similar to what occurs in the context of a rhizomatic labyrinth, in which multiplicity[12] makes up the fuel of constitution of reality, or rather, the process of teacher education is not included in any totality, nor does it refer to an exclusive subject. As Freitas (2012) put it, although with somewhat difficult terminology, in the work A Thousand Platots, philosophers Gilles Deleuze and Felix Guattari offer a creative philosophical toolkit for dealing with the complex social dynamics of teaching environments, as well as entertaining analogies. "They provoke us to consider a radically new ontology of the social, in which subjectivity is formed by discontinuity, rupture, and multiplicity in a vast rhizomatic set of interleaving" (Freitas, 2012, p. 561). In this sense, thinking of teacher education as a rhizomatic process, is to take it as something in permanent transformation, as something non-linear[13], unstable amid a constellation of ideas, an unfinished work, open and in search of innovations - we reiterate - that are not restricted to the unprecedented, but that bring vitality to the process.

With this perspective, we glimpse the possibility of working with teacher training that is closely linked to a relationship of otherness, a relationship permeated with affections, irruptions and deconstructions of thought that occur in the encounters and that, at times, brings up a mist, an incorporeal vapor, which makes the subjects involved in the encounter, bodies exposed to affections. In this way, such a training proposal seems to gain power if the formal stabilities of the training process are suspended, because the maintenance of certainties, which marks a prescriptive training, which preserves a character of preservation of what is already known, limits the possibilities of something happening that has not been

---

and relating with the intention to displace, problematize, create small and powerful possibilities of approaching the field of corporeality. In this direction the body is affirmed in its ability to affect and be affected by others" (Liberan & Lima, 2015, p. 185).

[12] According to Deleuze (2019), multiplicity relates to the different, the disparate, it machinates the becoming, and the becoming expresses multiplicity through the roughness of the logic of meaning. Thus, we assume multiplicity as a voice that drives the realization of difference in intensities, in expressions, in escape planes, and in flows of force.

[13] As Freitas (2012, p. 561) explains, "a rhizome can be broken or cut, but is started again elsewhere on one of its old lines or start new lines. Every rhizome contains 'lines of segmentarity' by which it is layered and territorialized and imbued with signification, but they also contain lines of flight or lines of deterritorialization, where a break breaks with the entity."

planned. Something that overcomes ready-made, quick answers, that discards the way of understanding, in which strangeness is ignored and that cultivates training as a process, which can be controlled, named or explained.

Following Souza's (2018) reflections, we understand that such processes can promote a (de)formation of subjects, that is, a displacement towards new encounters, which have the power to break with the return of the subject to a certain original cultural horizon. This understanding is shrouded by a tragic, disintegrating matter, "[...] they are journeys of deformation, in which there is no going home. Escape is not a journey of tourist enjoyment, but an uncertain journey, whose destination is unpredictable and uncontrollable and of uneducable formation" (Souza, 2018, p. 79). Displacement is a (de)formative possibility since, when moving, the subject loses its identification references and, in order not to remain on the sidelines, it needs to reinvent itself. Such displacements, by not being simplified, promote a transformation of the subject by giving him an experience with the uncertain forms of existence present in the world, which become evident through encounters with other subjects.

Portfolios as possible spaces for (de)formation

Figure 2: Work by South African artist Pamela PhatsimoSunstrum (Quadra I, 2016), in the exhibition "Still HereTomorrowTo High Five You Yesterday".
Source: at the Zeitz Museum of Contemporary Art Africa in Cape Town - South Africa (2019).

I want there to be no certainty whether you are looking into the deep past or the distant future.
Pamela PhatsimoSunstrum (2020)

The historical narratives of teachers and other education actors have shown to be an interesting pedagogical approach for actions aimed at teacher education because, among other aspects, they allow knowledge of several and unique ways of being a teacher, approaches to different times-spaces-materialities, and problematizations of (pre)concepts that enable the tracing of new experiences in encounters. The strategies of training with narratives show

themselves as a potentiality of teaching in becoming, a thinking of this profession beyond the policies already based on it, bringing (future) teachers closer to situations that, perhaps, had not affected them before. For these reasons, we have investigated the mobilization of narratives in actions aimed at the formation of future teachers (of Mathematics), seeking comprehensions, problematizations and disclosures about what this pedagogical approach can do.

In this sense, we operate assuming the cartography, aiming to discuss the mobilizations of narratives in different Pibid subprojects, from the Universidade Estadual Paulista (Unesp/Rio Claro) and from the Universidade Federal de São Carlos (UFSCar), by the trainers. For this, in a movement of analysis of the interviews made available in Tizzo (2019) and Zaqueu-Xavier (2019), we were inspired by cartography, according to Kastrup (2014) and Rolnik (2014). Cartography can be objectively understood as a research walk that aims to follow the process, the movement - in our case, formal teacher training processes linked to Pibid subprojects. It is not about representing the researched object, but about establishing some clues to describe, discuss and, potentially, collectivize the researcher's experience when engaging with cartography. Rolnik (2014) signals that cartography operates as a possibility to consider the creation of new movements that unfold from a first, a second, and so on. Movements that can originate new spaces traversed by each receiver of the cartography constituted. Remember that cartography cannot be thought of as the production of maps that are limited to representations of a static whole, "but as a movement that accompanies and is made at the same time as the movements of transformation of the landscape" (Rolnik, 2014, p. 12). Thus, in a fluid and dynamic process that makes up the study, the stable principles that we take for granted can become experiential assumptions that, dialectically, will compose our resources for the attribution of meanings and world creation.

Among the possible strategies for working with narratives in processes aimed at the training of future teachers, the portfolio practice emerges in the research of Tizzo (2019) and Zaqueu-Xavier (2019) as a powerful practice not only for the construction of subjectivities, reflective and visual experiences, but also corporeal ones, which lead to inventive crossings of becoming a teacher. Such investigations were carried out with Pibid at Unesp/Rio Claro, and at UFSCar[14] , by the different undergraduate courses offered in such institutions.

The work with portfolios, as mobilized in the processes we investigated and according to the reports of the interviewed trainers, makes up an approach that aggregates both elements of monitoring by the teacher-trainer and of creation and invention by the teacher-students. In producing a portfolio in these contexts, the future teacher records experiences, experiences and impressions about activities he or she performs at the university and school or outside these institutions, as well as deals with personal experiences and life stories that, in some way, have influenced the choices that have been made, making them visible in a way that

---

[14] The works by Tizzo (2019) and Zaqueu-Xavier (2019) document all the contact made, through the Informed Consent Form, and the Authorization Letter for the development of the research, issued by the Pibid Accompaniment Commission - CAP.

supports an analysis of what is produced. Portfolios are, therefore, composed of a selection of evidence, facts, marks, or results that are presented with the intention of exposing a formative journey, a work process, which is offered as a possibility of turning in on oneself that happens during the entire process of portfolio construction. Because of these characteristics, the portfolio allows the future teacher to undertake exercises of analysis of his or her tasks and also offers elements for the trainer to look back at his or her performance, thinking about it and continuously reinventing it.

As reported by the teacher Isadora Valencise, in the portfolio, student-teachers seek, somehow, to theorize and follow with understandings in discussions with the group, to advance and get out of the commonsense interpretation. The collaborator analyzes that there are, at least, three phases that refer to the process of writing, reflection, and formation with portfolios: naive optimist, naive pessimist, and critical optimist. For her, the exercise of writing in portfolios and "the presence of university undergraduates and teachers in schools, participating in planning meetings, designing and implementing activities, evaluating and suggesting actions" (Gregolin, 2018, p. 97), provided by Pibid, and allied to the guidance and theoretical discussions, lead the student-teacher to a naive optimistic view, in which it is assumed that the school alone is able to change realities; Then there is the naive pessimistic view, in which the students understand the school as a reproducer of inequalities and dominant ideologies; until reaching the critical optimistic view, aimed, according to her, at Pibid at UFSCar, in which the school is seen as a producer of knowledge, capable of promoting social transformations, without the principle of neutrality.

According to professor Roberto Tadeu, working with portfolios is not only a descriptive and documental record of everything that happened during a certain formative process, but also refers to a way of stimulating critical-reflective thinking and generating conditions for an ethical exercise in teacher training. It is, in this way, a pedagogical practice, for the exercise of narrativity in the formative process, for the open dialogue, ample with itself, about certain circumstances of activities, which allows, for example, thinking about the organization of a pedagogical work in a non-fragmented way, but open to mutations, according to what is being experienced and brought by those involved.

For Sá-Chaves (2004, 2005), one of the references used in the contexts we investigated, the use of portfolios responds to a new (other) philosophy of training, in which professional knowledge is based on the articulation with the different dimensions involving the teaching profession. According to the author, the portfolio can deal with a process based on the principles of "personality", "self-implication", "awareness", "unfinishing and continuity[15]". This practice shows itself, therefore, powerful for problematizations of

---

[15] According to what is presented in the work of Sá-Chaves (2004), the principle of personality is related to the value that the teacher in training attributes to his/her own knowledge, to his/her own ideologies and weaknesses. This principle also says about the commitment that the teacher trainer must assume in getting to know the student to whom he or she flexes the formative process. Thinking from this perspective, the portfolio can operate as a means of introducing the future teacher to himself and to the teacher trainer. The principle of self-implication refers to the movement in which the student broadens his view of his role in the formative process, in a way, giving up passivity and becoming involved in this process in a more enthusiastic way. These principles

inconstancies in the formative process and is based on narrative discourse in order to produce testimonies about personal experiences and about what was reported when thinking about them or part of them.

Teacher Fernanda Keila reported that she uses the portfolio in her group always seeking to rescue and value teacher autonomy, because according to her, "if we continue to think that only the university produces knowledge, the teacher will be a second-hand professional category" (Zaqueu-Xavier, 2019, p. 76). Aiming at teaching autonomy via narrative practices seemed to us to go along with how this exercise allows to accompany the subject's subjectivation process. To have autonomy and to be autonomous is to recognize oneself as being crossed and involved by power relations, it is to be affected by forces of agglomeration of intensities that come from and act in different directions and, above all, to be aware that, if on the one hand the subject suffers such effects, on the other hand, it also exercises them. It seems to us that such practice suggests that student-teachers have the opportunity to recognize certain forces and choose those by which they wish to be crossed, subjectivized. It is worth noting that the "autonomy we speak of is something of the individual's conquest; it is not given to the subject, but is a force that comes from within him, unlike that autonomy decided in higher hierarchical instances" (Silva, 2014, p. 5694). We also highlight that thinking and exercising autonomy as a possibility for training, dialogue, and the elaboration of tactics to debate and face the problems of education and educational public policies, for example, is characterized as a change in the subject's way of life. It is a daily exercise, devoted and unfinished (Bovo, 2011).

Evaluation was also an element that characterized the portfolio in the investigated processes. The teacher-trainer Maria do Carmo reported that, implicitly, the elaborators of the Institutional Project of Pibid at UFSCar, placed the portfolio as an evaluative instrument that "would help them 'evaluate' the progress and participation of students in Pibid. It would be a formative evaluation for all involved: undergraduates, teachers of Basic Education and teachers at the university". (Zaqueu-Xavier, 2019, p. 121).

Thus, in analyzing such contexts, we observe that the evaluative process exerts power as much as conducting a formative movement also is. Moreover, to the extent that the teacher coordinators interviewed exercise power, they also suffer effect from these and others. These relationships establish, in one way or another, actions of control and disciplinarization in all senses. About this, we emphasize that control is not only a mechanism of surveillance over what subjects do, but also ways of verifying, affecting and problematizing what they can do, what they are capable of, what they wish to do, that is, what is in the imminence of doing in/with the environments they participate in. The notion of disciplinarization, on the other hand, is related to disciplinary processes, that is, to the ways in which we can control

---

encourage the student to become conscious, a phase in which the future teacher revitalizes his convictions, that is, he expands his possibilities of analysis in relation to his own experiences. Last but not least, the principles of unfinishedness and continuity refer to an amalgam that understands learning as something unfinished, a training that produces affect throughout the life of a subject, a teacher.

conduct, behavior, attitudes, intensify performance, expand capacities, and direct subjects in such a way as to awaken their potencies. With this, we want to show that power is not only linked to mechanisms of violence, control, disciplinarization, etc., it is also a vehicle for the production of knowledge and processes of subjectivation.

We emphasize that the discursive practices that manufacture, maintain and transform what is established by portfolios are transitory, since they are directly linked to the contexts and institutions analyzed. Moreover, our analysis of these uses of portfolios is as transitory as the very uses made of them in the contexts analyzed.

The mobilization of portfolios in the Pibid of UFSCar is conducted and mediated by social practices institutionalized by policies, desires and truths that often seem to be external to the subjects that produce them, that is, they are guidelines based on material discourses, that is, on particular norms and values, in the case of the Pibid of this institution, of the coordinating teachers that guide the production of these writings and of the official documents that regulate their use. These are mobilizations that seek to problematize the ways in which student-teachers are historically constituted through crossings.

In this way, the mobilization of the portfolio in the analyzed processes seems to operate as a possibility for the student-teacher to launch himself in becoming, in daily displacements without the bonds of preconceptions about the spaces and "things" that affect them. This practice seemed to us potential for actions in teacher education under a perspective in which the exploration of the environments in which student-teachers and teacher-trainers live every day, related to professional practices or not, can make them live the university and the school with their bodies free from the bonds of the roles occupied inside these institutions. Such aspects open possibilities to practice and invent the spaces and themselves in each experience, in a process of creating shifting identities. By producing their portfolios, in the dialogue about subjectivities, in the relations between people, spaces and things, the student-teachers learn about their places as teachers in situations not necessarily linked to formally educational acts, opening possibilities for the creation of smooth spaces.

Among portfolios, crossings and inventions, we understand that thinking about actions aimed at teacher education processes implies investing in possibilities, even if provisional, as they are becoming, of constructions of subjectivities and social and material experiences, which promote creations of meanings and other professional senses about 'being a teacher'. We envision that the portfolio can operate in the process of mathematics teacher education, as a potential approach of production, reconstruction and re-elaboration of meanings and knowledge, involving the teaching and learning of content or of a mathematical theme. Moreover, with regard to evaluation, the work with portfolios can make both the teacher trainer and the students realize the instabilities that involve personal formative processes, from each circumstance that the subject chooses to narrate and bring in the production of the portfolio. Thus, the work with portfolios, in the context of mathematics teacher training, can go beyond creating and enhancing possibilities of interaction between the teacher trainer and the teacher in training; it can enable the future teacher to expose

himself and let himself be affected by other expositions, since this approach is not only limited to the evidence of assimilations about the contents, but also displays a significant part of the process of constitution of a teaching professional. In the production of a portfolio, as in a drawing, some traces are initially shown, then recomposed, remade, rearranged, and sometimes erased, in an uninterrupted movement of action and (de)formation.

Future visions: reiterations

Based on the arguments presented, it is worth reiterating that when we think of a formation in this perspective, we do not intend to propose an instrument for the process of teacher formation, but rather, an exercise of placing oneself in a path of openness to thought, to sensitivity, to action and, especially, to passion. Even if this proposal is not understood as openness, as a gesture of rebellion or as a possibility to explore what one does not know, it can be captured by the norms of knowledge and the disciplines of thinking and converted into a doctrine or method.

Teacher education, seen in this way, indicates that what matters is not the subject defined a priori, but the effects that the affections arising from it imprint on this process of alterity, of exteriority, a dispersed and nomadic multiplicity that escapes any attempt to reduce it and that culminates in a relationship in which something of me passes to the other and something of the other passes to me and, in this passage, in this encounter, we suffer effects, affections, and passions.

By this we mean that this process goes beyond an empathy for methods and theories that create previously established striations. We understand that empathy is something that is felt when we imagine ourselves in the other's place. However, this is not what we are talking about, but rather, a movement that exercises a way of occupying an embryo that wants to be born in us, that is, a plural becoming that is not to be confused with empathy, but that is of the order of occupation, of the invention of a body affected by affections, which undo previous inventions, and that, in this way, constitutes a transvalued body-collective. Empathy is ruled by separation, by distance with the other, while the politics of affections is all anthropophagy. The point of all this is that, in anthropophagy, to let oneself be affected involves an "undoing" of oneself always into another, because it is not of the order of identity, but of the order of difference.

References

Barros, M. (2010). *Poesia completa*. São Paulo: Leya.

Bovo, A. A. (2011). *Abrindo a Caixa Preta da Escola*: uma discussão acerca da cultura escolar e da prática pedagógica do professor de matemática. Tese (Doutorado em Educação Matemática). Universidade Estadual Paulista, Instituto de Geociências e Ciências Exatas. Rio Claro: Unesp.

Deleuze, G., & Guattari, F. (1995). *Mil Platôs:* capitalismo e esquizofrenia. Rio de Janeiro: Editora 34.

ZETETIKÉ

Deleuze, G. (2019). *Cursos sobre Spinoza (Vincennes, 1978-1981)/Gilles Deleuze*. Fortaleza: EdUECE, 2019.

Foucault, M. (2010). Polêmica, política e problematizações. In: M. Foucault. *Ditos & Escritos V*: Ética, sexualidade, política (pp. 225-233). Rio de Janeiro: Forense Universitária.

Freire, P. (1987). *Educação como prática da liberdade*. Rio de Janeiro: Paz e Terra.

Freitas, E. de (2012). The Classroom as Rhizome: New Strategies for Diagramming Knotted Interactions. *QualitativeInquiry*, 18(7), 557-570.

Garnica, A. V. M. (2014). Cartografias contemporâneas: mapear a formação de professores de matemática. In: *Cartografias Contemporâneas:* mapeando a formação de professores de matemática no Brasil. (pp. 39-64). Curitiba: Appris.

Gomes, M. L. M. (2014). Formação e Atuação de Professores de Matemática, Testemunhos e Mapas. In: *Cartografias Contemporâneas:* mapeando a formação de professores de matemática no Brasil. (pp. 11-37). Curitiba: Appris.

Gregolin, I. V. (2018). Processo de Formação de Professores de Línguas com Uso de Portfólios: Experiências do Pibid-Letras da UFSCar. In: I. C. T. Bozzini, M. R. Onofre, I. M. S. Santos & R. Sebastiani (Orgs.), *Pibid UFSCar:* uma parceria colaborativa entre universidade e escola (pp. 95-106). São Carlos: Pedro & João Editores.

Hall, S. Quem precisa da identidade? In: T. T. Silva (Org.), *Identidade e diferença*: a perspectiva dos estudos culturais (pp. 103-133). Petrópolis: Vozes.

Josso, M. C. (2004). *Experiências de vida e formação.* São Paulo: Cortez.

Kastrup, V. (2005). Políticas cognitivas na formação do professor e o problema do devir-mestre. *Educ. Soc.*, 26(93), 1273-1288.

Kastrup, V. (2014). O Funcionamento da Atenção no Trabalho do Cartógrafo. In: E. Passos, V. Kastrup & L. Escóssia (Org.), *Pistas do Método da Cartografia*: pesquisa-intervenção e produção de subjetividade (pp. 32-51.). Porto Alegre: Sulinas.

Liberman, F., & Lima, E. M. F. de A. (2015). Um corpo de cartógrafo. *Interface: comunicação, saúde e educação*, 19(52), 183-193.

Marcello, F. de A. (2004). O conceito de dispositivo em Foucault: mídia e produção agonística de sujeitos-maternos. *Educação e Realidade*, 29(1), 199-2013.

Queiroz, S. M. (2015). *Movimentos que permeiam o devir professor de matemática de alguns licenciandos*. Tese (Doutorado em Educação Matemática). Universidade Estadual Paulista, Instituto de Geociências e Ciências Exatas. Rio Claro: Unesp.

Rocha, S. P. V. (2015). Tornar-se quem se é: educação como formação, educação como transformação. *Anais do Terceiro Congresso Latinoamericano de Filosofia da Educação* (pp. 1-14). México: Universidade Nacional Autónoma de México.

Rolnik, S. (2014). *Cartografia sentimental:* transformações contemporâneas do desejo. Porto Alegre: Sulina.

Sá-Chaves, I. (2004). *Portfolios Reflexivos.* Estratégia de formação e de Supervisão. Aveiro: Unidade de Investigação Didáctica e tecnologia na Formação de Formadores.

Sá-Chaves, I. (2005). *Os "Portfolios" Reflexivos (também) trazem gente dentro*. Porto: Porto Editora.

Schneider, C. I. (2013). Problemáticas dos espaços de formação docente: o liso, o estriado e a poética da história. *Revista, tempo, espaço, linguagem*, 4(3), 08-21.

Silva, M. T. da (2014). Localizando a "Autonomia" do Professor de Matemática Através da Cartografia. *Anais do Segundo Congresso nacional de formação de professore e Décimo Segundo Congresso estadual paulista sobre formação de educadores* (pp. 5689-5702). Águas de Lindóia: Prograd Unesp.

Souza, R. M. (2018). Viagem (de)formative na narrative autobiográfica de Elias Canetti. In: A. C. Mignot, D. Z. Moraes & R. Martins (Orgs.), *Atos de Biografar:* narrativas digitais, história, literature e artes (pp. 75-85). Curitiba: CRV.

Sunstrum, P. P. (2020). Em entrevista para Wepresent. Retirado em 28 de outubro, 2020, de: https://wepresent.wetransfer.com/story/pamela-phatsimo-sunstrum/

Tizzo, V. S. (2019). *Mobilizações de narrativas na (e para a) formação de professores*: potencialidades no (e a partir do) Programa Institucional de Bolsas de Iniciação à Docência. Tese (Doutorado em Educação Matemática). Universidade Estadual Paulista, Instituto de Geociências e Ciências Exatas. Rio Claro: Unesp.

Vinci, C. F. R. G. (2015). A problematização e as pesquisas educacionais: sobre um gesto analítico foucaultiano. *Filosofia e Educação*, 7(2), 195-219.

Walsh, C. (2017). ¿Interculturalidad y (de)colonialidad? Gritos, grietas y siembras desde AbyaYala. In: A. G. Diniz & D. A. Pereira (Org.), *Poéticas y políticas da linguagemem vías de decolonização* (pp. 19-53). Foz do Iguaçu: Universidad Integración Latinoamericana.

Zaqueu-Xavier, A. C. M. (2019). *Narrativas na formação de professores*: possibilidades junto ao Pibid da UFSCar. Tese (Doutorado em Educação Matemática). Universidade Estadual Paulista, Instituto de Geociências e Ciências Exatas. Rio Claro: Unesp.