

**RESIGNIFICATIONS OF TEACHING PRACTICES IN HIGHER EDUCATION
BASED ON ONLINE EDUCATION PRINCIPLES**

***RESSIGNIFICAÇÕES DE PRÁTICAS DOCENTES NO ENSINO SUPERIOR COM
BASE NOS PRINCÍPIOS DA EDUCAÇÃO ONLINE***

***RESIGNIFICACIONES DE LAS PRÁCTICAS DOCENTES EN EDUCACIÓN
SUPERIOR BASADAS EN PRINCIPIOS DE EDUCACIÓN EN LÍNEA***

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ABSTRACT: In this article, we report an experience in a training course conducted with the aim of developing competence in designing a class based on the Principles of Online Education. Through the course, we seek to understand how university professors give new meaning to their online educational practices. We chose the epistemology of practice and research with the teaching experience to think about the teachers' narratives throughout the course, especially those related to the classes that the teachers give, how they rethought, updated and gave them new meanings. We understand that resignifications occur through multiple processes of estrangement, self-reflective practices, the deconstruction of a mindset, reconstruction of theoretical-epistemic-methodological assumptions and construction of new teaching knowledge. We conclude that the discussion about online education and its principles have the potential to give new meaning to teachers' practices.

KEYWORDS: Teacher training. Online education. Educational practices. Higher education teaching. Remote teaching.

RESUMO: Neste artigo, relatamos uma experiência em um curso voltado para desenvolver a competência de professoras/es universitárias/os em desenhar uma aula com base nos Princípios da Educação Online. Buscamos compreender como as/os docentes ressignificam suas práticas educativas em tempos de educação mediada por tecnologias. Movimentamo-nos pela epistemologia da prática e da pesquisa com a experiência docente para refletir sobre as narrativas que emergiram no curso, principalmente as relacionadas às aulas que as/os docentes dão, como as repensaram, atualizaram e lhes atribuíram novos/outros sentidos. Compreendemos que as ressignificações são constituídas por múltiplos processos de estranhamentos, por práticas reflexivas de si, pela desconstrução de algumas certezas, reconstrução dos pressupostos teórico-epistêmico-metodológicos e pela construção de novos/outros saberes docentes. Concluímos que a discussão sobre educação online e seus

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princípios têm potencial para a ressignificação das práticas das/os formadores no ensino superior.

PALAVRAS-CHAVE: *Formação docente. Educação online. Práticas educativas. Docência do ensino superior. Ensino remoto.*

RESUMEN: *En este artículo, reportamos una experiencia en un curso de formación realizado con el objetivo de desarrollar competencia en preparar una clase basada en los Principios de Educación en Línea. A través del curso, buscamos comprender cómo los profesores universitarios dan un nuevo significado a sus prácticas educativas en línea. Elegimos la epistemología de la práctica y la investigación con la experiencia docente para reflexionar sobre las narrativas de los docentes a lo largo del curso, especialmente las relacionadas con las clases que los docentes imparten, cómo las repensaron, actualizaron y les dieron nuevos significados. Entendemos que las resignificaciones se dan a través de múltiples procesos de extrañamiento, prácticas autorreflexivas, deconstrucción de una mentalidad, reconstrucción de supuestos teórico-epistémico-metodológicos y construcción de nuevos conocimientos docentes. Concluimos que la discusión sobre la educación en línea y sus principios tiene el potencial de dar un nuevo significado a las prácticas de los docentes.*

PALABRAS CLAVE: *Formación de profesores. Educación en línea. Práticas educativas. Enseñanza de la educación superior. Enseñanza remota.*

Initial Problematizations

On the day the first Covid-19 death in Brazil was announced³, face-to-face classes were replaced by "classes in digital media, [...] that use information and communication media and technologies", as provided in Ordinance No. 343 of the Ministry of Education (MEC) published on March 17, 2020 (BRAZIL, 2020, our translation). The pandemic scenario has reconfigured the entire educational system. The inequalities in teaching-learning conditions were dilated even more. The teaching work had to be done in an emergency way, with little planning, in a precarious situation. It became urgent to guarantee the digital-cultural inclusion and the continuing education of the teachers. Brazilian public universities suspended classes to prepare for remote teaching, taking steps to guarantee access to the Internet for all students and offering continuing education courses on emergency remote teaching. In the following months, all the university professors had their first experiences in this modality invented in times of health crisis. With the new way of teaching, anxieties and dilemmas emerged.

³Available at: <https://g1.globo.com/sp/sao-paulo/noticia/2021/03/17/anuncio-da-primeira-morte-por-covid-19-no-brasil-completa-um-ano.ghtml>. Access on: 30 Sept. 2021.

In this article, we report an experience in a continuing education course offered remotely to teachers from a public Brazilian university during the first semester of 2021. The objective of the course was to develop the teachers' competence in designing a class based on the Principles of Online Education, which will be discussed in the next sections. Through the course, we sought to understand how university professors resignify their educational practices in times of remote learning.

Online education and its principles: theorizing about university teacher training

Online education (SANTOS, 2019) does not refer to any realization of classes by networked digital technologies. It is a specific didactic-pedagogical approach, its own and contextualized methodology that is inspired by the practices of cyberculture to (re)think the teaching-learning processes, which can be experienced in remote, distance (DL), hybrid, and face-to-face modality. Online education is opposed to cyber-technical pedagogy, which is an "instructionalist, massive, algorithmic/automated, platformed, gamified, data-ficated, uberized" (PIMENTEL; CARVALHO, 2021a).

Online education emerges from the revolution our society has been going through. If the last century was marked by the mass media, which transmit information in a "one to all" model, in this century our contemporary culture is marked by networked, online, post-massive communication, of all connected to all. This reconfiguration based on interactivity, in which networked computer systems empower collaboration, conversation, and (co)authorship, leads us to rethink that the classroom requires a fundamental change in the conversational relationship between teacher and students and in the students' relationship with each other (SILVA, 2021).

Online education can be characterized by some principles (PIMENTEL; CARVALHO, 2020): "knowledge as an open work", possible to be re-signified and co-created in an endless movement; "online content curation", in which the teacher and the students select, organize and share content about the studied subject; "diverse computational environments", in which several networked digital technologies are appropriated, in the educational context, beyond the Virtual Learning Environment (VLE); "Collaborative learning", in which knowledge is woven in the collective, collaboratively, valuing the multiple knowledges of each student in the class; "conversation among all, interactively", in which dialogue is promoted among all and not only the dictation-speech of the teacher; "authorial activities inspired in the practices of cyberculture, in which the student has the opportunity to apply and transform the learned knowledge, giving it new meaning; "online teaching mediation for collaboration", in which the teacher plays the

role of a leader of the group and mediator of the knowledge that is being weaved in the collective; and "formative and collaborative evaluation", in which evaluation for learning is carried out continuously, in each class, by means of the authorial activities performed by the students, the conversations, and other traces that they leave in the online systems. The principles of online education were proposed to support teachers in planning and carrying out lessons. We have worked on these principles in teacher training courses.

Teacher education takes place in different ways: teachers can form themselves (self-training); form themselves in relation to others (hetero-training); and form themselves through things and their critical understanding (eco-training) (NÓVOA, 2004). Mainly, we understand that "no one is formed in a vacuum. To be formed presupposes exchange, experience, social interactions, learning, an endless number of relationships" (MOITA, 2014, p. 115, our translation). Thus, we understand the formation of the teachers "as a process in which the teacher constructs his or her path, through his or her doing by doing, it presents itself as a dynamic act of subjective experiences, perceptions, opinions and collective creative singularities" (SANTOS, 2015, p. 43, our translation).

We share the idea that formation is an existential process. It "cannot be explained by the logics of theoretical models, it is not deduced, it is understood, it is made explicit in its happening with the Being existing in formation, reflecting/narrating about its formation and the "being formed" (MACEDO, 2010, p. 32, our translation). We add that "the formation itself, as an experience of a Being that learns, appears in act and meaning" (MACEDO, 2010, p. 32, our translation). It takes place in "multiple educational networks" (ALVES, 2012), such as school, university, continuing education courses, family, work, social movement, online social networks, museums, etc.

The formation happens through experience. Experiential training is constituted through multiple ethical-aesthetic-political experiential processes that unfolded in the construction of the self, in what we became and said we were as teachers, reverberating in our educational practices.

We understand that teacher training "[...] implies training for the exercise of a profession. The professionalization of teachers is something that is built and supported by diverse knowledge" (D'ÁVILA; SONNEVILLE, 2008, p. 41, our translation). We point out, however, that university teachers often "enter the profession without a reflection on education and without scientifically knowing the constitutive elements of the teaching action itself" (D'ÁVILA; MADEIRA; GUERRA, 2018, p. 63-64, our translation). Because of this, we consider that it has become increasingly necessary to expand pedagogical training courses for

higher education, even because many university professors end up reproducing in the classes, they teach the practices they have had throughout their school life, because they were trained through them, but they are not always good practices. Many times, these teachers are unaware of the didactic-pedagogical approach they practice, they are unaware of the epistemic-theoretical-methodological foundations that support the practices they mobilize and, thus, they act in the classroom without authorship in the didactic propositions and without knowing how to theorize the educational practice and research the effects of their actions on and with learning; sometimes, without understanding the problems, they end up promoting the pedagogy of transmission, perpetuating the "banking education" (FREIRE, 1970).

To deepen the discussions about the formation of educators, in the following section we bring experiences of a continuing education course aimed at university teachers, from which we discuss the re-signification of teaching practices.

Epistemic-methodological movements

In order to understand how university teachers resignify their educational practices from the discussion about the principles of online education, we conducted the research presented here based on the assumptions of the "epistemology of teaching practice" (THERRIEN, 2006) and the "research-with-experience" (MACEDO, 2015).

"The epistemology of practice as a training principle for education professionals opens perspectives for the reconstruction of new horizons of human and social emancipation." (THERRIEN, 2006, p. 71, our translation). In this epistemology, "practice appears as a space not only for the construction of collective subjects, but also for the construction of new understandings of the world of life and situated knowledge" (THERRIEN, 2006, p. 72, our translation).

The research-with-experience starts from the understanding that the experience is irreducible, a hyper-complex phenomenon and mediated by multiple references. "Experience is not something that happens, it is what implies us; therefore, it affects us, touches us, mobilizes us and also imposes us, commits us." (MACEDO, 2015, p. 25, our translation). Moreover, "Research-with-experience means to find subjective, uncertain worlds, linked to the happening, to the singular. Therefore, to accompany the experience is to show the relationships that are established with the events." (MACEDO, 2015, p. 52, our translation). In the case of this research, the experience that we accompany is the training of university teachers fostered by the event of the pandemic.

The everyday life of the research took place in a remote continuing education course offered to 26 teachers from a public Brazilian university in the first semester of 2021. The objective of the course was to develop the competence to design a class based on the principles of online education. We started from the understanding that teachers have their didactic and pedagogical knowledge and, with the course, we sought to expand this knowledge with the discussion of a specific didactic and pedagogical approach, online education, which has gained more visibility since the imposition of emergency remote teaching.

The course was organized in 13 classes (Figure 1), in which we approached the didactic design based on the principles of online education.

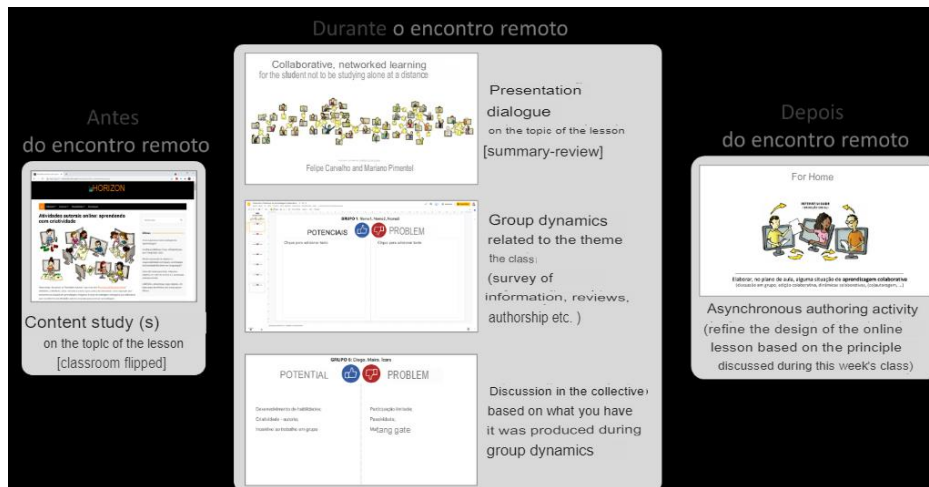
Figure 1 – Classes of the continuing education course for university professors



Source: Prepared by the authors

Most of the classes were organized in three moments (Figure 2): (1) before the remote meeting - some contents were selected on the class theme for the teachers/course members to study before the remote meeting, thus effecting a flipped class; (2) during the remote meeting - we usually held a "dialogical presentation" to make a synthesis-review of the class theme, then we held some group dynamics to raise information, elaborate criticism, authorship, etc., and then we held a discussion in the group based on what had been produced in the group dynamics; (3) after the remote meeting - an authorial activity was left "at home" (asynchronous activity): based on the principle worked in the lesson of the week, the teacher/course participant should refine the design of his/her online lesson in development (that in the end is presented to the class).

Figure 2 – Didactic design of most of the lessons⁴



Source: Prepared by the authors

In the following section, we present our reflections on the teachers' narratives that emerged in the classes of this training course. We chose narratives as data for this qualitative research because "the history of teaching practices can be known not only by watching the classes teachers give, but also by listening to what is 'told' by these many practitioners about their pedagogical, didactic, and curricular experiences" (ALVES, 2007b, p. 69, our translation). We understand that narratives, "more than sources or methodological resources, [...] are conceptual characters" (ALVES, 2007a, p. 5, our translation), that is, they are "figures, arguments or artifacts that enter as the other - the one with whom we 'talk' or, yet, to whom we need to respond because it raises questions, that is, the one/that with which we think" (ALVES, 2013, p. 163, our translation).

Narratives of formation: experiences of redefinition of the teaching practices

We selected some fragments of the teachers' narratives about each principle of online education (PIMENTEL; CARVALHO, 2020) to think how a certain principle contributed to the redefinition of their practices. We did not identify the teacher author of each fragment (we chose not to present any identification, either pseudonym or sequential identification), because we guaranteed the anonymity for research ethical reasons. We register here our gratitude to all those who authorized their narratives to be used as data for our research and to be published in reports like this one.

⁴ Antes do encontro remoto = Before the remote meeting; Durante o encontro remoto = During the remote meeting; Depois do encontro remoto = After the remote meeting

Principle 1 - Knowledge as an open work

In Lesson 4, we discussed that knowledge about online education is open, that each teacher needs to redefine it, appropriate the principles, and apply them in their teaching practices in their own way, since there is no "cake recipe". To conceive knowledge as an open work is unusual for some teachers, although they recognize its importance: "I usually work with scientific knowledge already consolidated, that is, without changes, or only those valid by science. But this new approach is more collaborative and more enriching for the student"; "I realized that we have the opportunity to relax a little more, to recognize that we don't know everything and that students can come with new knowledge to share. This made me realize the richness that a class can bring in this sense. The teachers' narratives help us to think that the "pedagogy of transmission" (SILVA, 2021) is still a practice in higher education, but that through discussion/training some teachers may be able to "relax" and overcome the emphasis on the exposure of contents and start valuing more the students' knowledge, their competences and capacities for critical and creative authorship.

Principle 2 - Online content curation

In Lesson 5, we deepened the discussion about the practice of curating content with different degrees of complexity and in different languages. The teacher, when curating, is mapping, organizing and giving visibility to certain contents, above all, in order to enhance the desired education. We discussed the importance of using the contents as triggers for authorship, not to be reproduced-memorized. *"Another issue that I changed in my planning was the proposal of diverse materials through an online curatorship, mainly at the moment of replacing what we used to have in the classroom"; "I believe that I already practice a little bit the online content curatorship. But I didn't see it in a good light, I thought that I should produce all the content for the class. After the course, I feel more secure to occupy this role of curator as well"*. These fragments of narratives trigger in us the reflection that curating is already a routine action in the planning of classes; maybe the novelty for some of the teacher-curators is the authorization to, on one end, get free from a single textbook, and on the other end to develop all the contents of the subject; the practice of curating is an authorization to freely explore online contents in multiple languages (video classes, web pages, online courses, blog, etc.), in different degrees of complexity, and the curation can even be done by the students themselves.

Principle 3 - Diverse computing environments

In Class 6, we talked about the various computer systems that we used throughout the course in addition to the VLE itself. We discussed the uses of these systems in the formative practices: the possibility of meeting in small groups through videoconference systems (such as Zoom's Breakout Groups); information gathering through Mentimeter; exposure of students' authorship through Padlet; collaborative work through Miro; questions and answers through Kahoot! to trigger conversations about a content; synthesis and structuring of concepts through Coggle; among other possibilities. We discussed the different uses/appropriations of these computer systems with the purpose of promoting interactivity, conversation, collaboration, and authorship. These discussions generated some reflections in the teacher-courses: *"I found very interesting the approaches related to the available variety of computational systems that should proactively interfere in the formation of the students"; "I confess that I am a little afraid of using many ambiences, because it involves, besides the learning of the foreseen contents, the learning of the tool and the technological apparatus that many students don't have. So, I have tried to use the more classic tools, such as Meet, Classroom, Google Documents and Forms"*. This second narrative draws our attention to the risk of promoting pyrotechnic shows, a technological exhibitionism with the potential to distract attention from the content: technologies need to be used with didactic-pedagogical intentionality, with the purpose of supporting the classes. The statement of preference for the use of "more classical" computer systems shows that the systems used in (cyber)cultural/social/everyday practices influence the teachers' choices about which systems to mobilize in the classes they teach, which makes us reflect on the importance of continuing education courses to expand the teachers-course participants' repertoires of networked digital technologies beyond the most well-known systems, not focusing on the presentation of their functionalities in an instrumental and technician approach, but rather on their contextualized uses in educational practices. *"We have a tool at our disposal, but a tool alone does not make me more efficient as an educator. A broader conception is necessary to understand teaching in times of pandemic and after the pandemic, in the classroom or remotely"*. We agree with this reflection, there is no magic technology capable of transforming teaching; it is the didactic-pedagogical conception put into action by means of, hybridized, and networked digital technologies, which well characterize our time regardless of the educational modality: remote, distance, hybrid or face-to-face.

Principle 4 - Collaborative, Networked Learning

In the course, we sought to create a collaborative environment among the teacher-course participants, in such a way that all of them perceived themselves as part of a class and realized that they also learn by exchanging with their colleagues. For example, in Class 7, we worked with collaborative dynamics in which the teachers were organized in small groups and each group was gathered in an online room to elaborate a presentation about the potentialities and difficulties of collaborative learning, and, after that, everyone was gathered again in a single online room for each group to discuss their notes with the class. In this class, many narratives emerged about the difficulties of promoting collaboration in the classroom: *"I still notice that some students, because they are shy, remain almost invisible in these moments of participation"; "We have great conceptions, but what is really viable for the classroom? Transpose the class to the cell phone and propose activities through it, contributing to a more focused classroom, but collaborative and full of discussions is practically a miracle!"* Narratives also emerged about the importance of collaboration as an exercise of democracy, to enhance coexistence with differences, openness to dialogue, and the construction of social bonds, breaking/surpassing the logic of individualistic learning. *"I could realize that I can divide the class into groups to make possible the all-to-all collaboration. I realize that digital tools are our allies and the teaching/learning process is, in essence, interactive and collaborative."* If the operationalization of collaboration in remote teaching can be seen by some teachers as something difficult, "practically a miracle", the experience in the course made it possible to discover/construct some possibilities for its effectiveness.

Principle 5 - Conversation among all, in interactivity

In all classes, we promoted conversation among all students, either synchronously during remote meetings, or asynchronously through bulletin boards, forums or messages exchanged through the VLE and the WhatsApp group. In Lesson 8, we discussed the importance of conversational situations in the formative process. We know that promoting conversation in class is not an easy task, as one teacher recounted:

In each class I try, still with little success, to promote conversation and interactivity among the students; I see that shyness or lack of engagement are barriers that prevent a more active participation. It is also a challenge for me, as a teacher, to look for more enthusiastic ways, through teacher mediation, to encourage closer participation among the students. However, in my last class, I was very satisfied with the participation of the class, I saw a much

greater engagement of the class, there was more interactivity and even a collaborative learning, with reports of experiences lived throughout the semester.

In this account, the teacher told us about her attempts to operationalize more conversation and interactivity in her classes, an offshoot of what we had been working on in the course. *"The course made me rethink about how I can open more of these spaces for discussion. [I can create a WhatsApp group to do this in a more continuous way]"*. It is true that we need to invent practices to create a more dialogic class, which requires a lot of experimentation to be able to foster conversation in each formative context, always understanding that authentic education "is not done from 'A' to 'B' or from 'A' over 'B', but from 'A' with 'B', mediated by the world" (FREIRE, 1970, p. 48, our translation).

Principle 6 - Online authoring activities

In the course several authoring activities were proposed, promoting both critical authorship (how to analyze the positive and negative aspects of each principle of online education) and creative authorship (how to create a new lesson plan guided by the principles). We dedicate Lesson 9 to the discussion of authorship in the formative process. Many teachers recognize the importance of authorship, although they acknowledge some challenges in making it effective: *"I managed to make the students produce something (text, maquette) both in the presential and remote, but I still consider it little"*. "As for the authorial and coauthorial activities, it is visible that not everyone has the same engagement in the activities, it is necessary to always stimulate the class, really this is something that we have to exercise day after day"; *"I understand that the students should seek to become more protagonists than 'supporting actors' in this process, because the authorship has always shown positive results, not in everyone unfortunately"*. These narratives made us aware that the investment in authorial practices, which provide opportunities for critical and creative thinking and value the knowledge of the students, requires engagement and commitment with the formation not only by the teachers, but also by the students.

Principle 7 - Online teaching mediation for collaboration

In all the classes, we try to perform an active teaching mediation, dialoguing with the class about the contents, with participation-intervention, co-creation, promoting debates, dynamizing collaboration, etc. This type of mediation is opposed to reactive mediation, in which the teacher remains available to answer students' questions. In Class 10, we talked about this. One teacher considered:

I consider active teaching mediation a great challenge for our transmissive school culture. Because, immersed in the culture of instruction, we use class time for students to read text and do exercises to check if the students express what they have learned. Today's generations can't stand this kind of lesson, that they need to read, find the right answer and write down the answer. They like to create and build, but they soon realize that school is not a creative environment that values individuality. This is where the active mediation of the teacher is important, to conduct the creative potential of these students. I try to mobilize critical authorship, however, I observe that in the first semester classes, the students welcome the proposals and are creative in their elaborations, while the classes of the more advanced or final semesters do not have the same view on the activities and usually complain about anything new or something they are not used to doing.

This narrative ratifies the importance of active faculty mediation throughout the entire formative process, from beginning to end. It may seem unreasonable or redundant to discuss the importance of teaching mediation in a course for teachers - the purpose is to alert to the rapid advance of cyber-technical pedagogy in higher education, which has made effective the art of teaching without teachers, with algorithmic didactic mediation, gamified, performed by computer platforms used as teaching machines (PIMENTEL; CARVALHO, 2021a). This alert serves to encourage reflection on the quality of mediation that each one has been practicing in their formative contexts.

Principle 8 - Formative and Collaborative Evaluation

In the course, five instruments were proposed to evaluate the competencies developed by the students: a test on the principles of online education (knowledge, the theoretical knowledge); the project of developing a lesson plan based on the principles of online education (skill, the know-how); as well as the attendance at the meetings, the study of selected contents and the participation in the proposed activities (attitude, the engagement in the study process). The evaluation instruments were presented and discussed with everyone, and the weight of each instrument in the final grade was negotiated with the class (it could even have zero weight) -

with this action, we established a "social contract" for the evaluation process of the class: "*I was very inspired by the way of establishing the 'social contract' for evaluation percentages*". As discussed in Class 11, the evaluations in the course were made in each class, in a continuous manner, conceived in a formative perspective. When we discussed evaluation in depth with the teachers, many debates and accounts of their own practice emerged: "*Here I learned how to make a truly formative evaluation, 'fairer'. My method was to apply a test and then a recovery for those who needed it*". Another teacher recounted:

For a couple of years, I have been trying to make students bring the portfolio as a tool for knowledge construction, in order to encourage their own knowledge, where they could build their knowledge and dissertate based on what they understood of the proposed theme. This also denotes, although on a small scale, the authoring activities. In the beginning, in person and with the use of paper, I think that the students did not understand this form of evaluation very well, because they were not used to it. Now, in the remote mode, I have brought this instrument to all the curricular components I teach and I notice that, with the use of platforms and websites (diverse computational environments), the students have had a re-signification of this type of activity, because they understand that it is a formative assessment, done every moment, since now I no longer apply the bimonthly tests that used to be daily instruments. I still want to promote an assessment based on competencies, using rubrics, which was a tool that I did not understand, but I believe that now it is clearer, and I will try to do more activities where I can apply a collaborative assessment.

These narratives shared by the teachers alerted us to the fact that the test is still a frequently used assessment instrument in higher education, and led us to reflect on the processes of searching/appropriating/inventing alternative assessment instruments to the test in the different formative contexts, a necessity imposed on many teachers during remote teaching (PIMENTEL; CARVALHO, 2021b).

On the re-signification of teaching practices

We talked with the teachers about what the principles of online education have contributed to the redefinition of their educational practices.

It was a big challenge for me to lead a class in emergency remote teaching. We had trainings last year, but they were more about tools and developing didactic sequences. This course provided a reflection on my way of teaching, not only through the network, but for face-to-face as well.

Considering that I have been a professional in education since 1980, I have an extremely traditional background. Throughout my career, I have sought to

update myself and meet the challenges that present themselves over time. With this in mind I enrolled in this course. The current context demands from us, education professionals, constant improvement. In this sense, the approach of the course about the principles of online education was of great importance and value for my training as a teacher, even because I have a very traditional training in pedagogical terms: this new context permeated by online classes is totally new to me. Little by little, as I assimilate and deepen my knowledge of the principles, I will implement the various techniques presented throughout the course.

This narrative of life history and teacher training leads us to the understanding that "to access the way each person is formed is to take into account the uniqueness of their history and especially the unique way they act, react and interact with their contexts" (MOITA, 2014, p. 115, our translation). We understand that, in the pandemic and remote teaching context, regarding the "permanent formation of teachers, the fundamental moment is the critical reflection on the practice. It is by critically thinking about today's or yesterday's practice that one can improve the next practice" (FREIRE, 1996, p. 43, our translation).

From the experiences lived with the teachers who participated in this research and training, we could have access to fragments of the **redefinition of the educational practices**, especially those related to the classes they teach, how they rethought them, updated them and gave them new/other meanings. The experiences lived provided us with clues to ponder that the re-significations are constituted by multiple processes of estrangement, by self-reflective practices and by the deconstruction of some certainties, reconstruction of the theoretical-epistemic-methodological assumptions and the construction of new/other teaching knowledge.

We understand that the re-significations are derived from: the implication with the training itself - how do I see myself as a teacher today and how do I improve the exercise of my profession even more, what kind of student do I intend to train; from the desire - what kind of teacher do I want to be, to become (self-training); and from daily life - which presents itself, requires us to act, take positions and produce displacements, as we have seen now with the pandemic (eco-training). We noticed that, in the process of redefining their own educational practices, the teachers talked about their concerns, manifested their dilemmas related to their online teaching, (re)discussed didactic and pedagogical approaches, shared their achievements and difficulties with new/other practices, and tried to build answers to their questions and concerns with the group - fellow teachers from the class-institution and teacher-trainers (hetero-training).

The redefinition of the teachers' educational practices showed the power of the continuing education of university teachers. We understand that it is not enough to study

contents (texts and lives); the re-significations are made mainly by the lived, practiced, discussed and reflected experience, through interactivity, with a lot of authorship, sharing, conversation and negotiation of meanings. *"Throughout the classes, I was able to reflect on my classroom practices and begin to appropriate the principles of online education"; "I found the didactics [of the course] very interesting and I will be inspired, especially, because it brings a lot of dialogue to the classes. I am already trying to establish more dialogue, always trying to promote a more open and interactive education"*.

We conclude that the continuing education of the teachers needs to be experiential (MACEDO, 2010), it requires experiencing other didactic-pedagogical approaches that allow them to problematize-theorize their own practices, rethink and re-signify them, which requires openness, willingness and much dialogue with the other. The creation of mediated collaborative spaces proved to be fundamental for the teachers to make movements towards a redefinition of the practices, feeling safe to talk about their concerns, dilemmas, fears and desires, sharing their impressions, doubts, experiments and findings.

Final remarks

In this research report, we seek to understand how university professors have resigned their educational practices based on the discussion about the principles of online education. We understand that this approach to education and its principles are important theoretical, epistemological, and practical tools/means that contribute to rethink the formation of teachers (university professors). It became evident the urgency of public policies that expand the spaces for continued pedagogical training for university professors and expand the material and digital infrastructure of professors and students for the implementation of didactic and pedagogical practices with the support of networked digital technologies, in tune with the present time, with our contemporary culture, the cyberculture.

We understand that "research-with-experience" (MACEDO, 2015) allowed us to problematize university teacher education, which is crossed/marked by the Covid-19 pandemic, by the lack of investments and by the precariousness of the teaching work. The research with experience has allowed us to know and reflect on the teaching practices shared by them, to follow how each teacher has attributed new meanings to their own educational practice, giving it new meaning.

We conclude this text emphasizing that the epistemology of practice "[...] allows us to identify privileged spaces of practices and experiences of coexistence among subjects

interacting dialogically in a collectivity" (THERRIEN, 2006, p. 72), and, based on it, weave new/other theorizations based on the lived-experiences and the singular constitutive of each teacher.

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