ECOLOGIZING KNOWLEDGE, REVERBERING FOR TEACHING BEING-DOING IN (POST)PANDEMIC TIMES

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Abstract

We present results of a study about the challenges of teaching practice in the context of the pandemic that we lived in 2020. We take complex thinking as the guiding thread to ecologize knowledge and establish relationships and reflections with the voices of female and male teachers in the basic education network that worked with this scenario. In this context, ecologize has the meaning of knowing oneself and the other, based on conceptual pluralities and valuing life. The methodological path was inspired in Bernard Charlot's methodological instrument (2009) for the generation and understanding of the voices of female and male teachers who lived the investigated daily life. The aforementioned instrument, called "balances of knowledge", allowed the analysis of the data generated, which is represented in a picture, a word cloud where the meanings of being and teaching in the path of the year of the pandemic lived are, the main voices being expressed: ecologize, emergency, digital technology, learning, feelings, meaningful,

innovation, learning, fabrics, possibilities and transformation. The interconnections between these voices and the theoretical concepts outlined in the study reverberate movements towards the knowledge of the self, giving meaning, with activation of complex thought networks, that the image of the figures that we present may signal new ways to face the challenges of the situations experienced.

Keywords: Ecologies of knowledge. Balances of Knowledge. Emergencies. Self-knowledge. (Re)drawings of teaching practice;

1. Introduction

This paper aims to reflect on education in times of (post)pandemic, considering the context arising from the social isolation triggered by COVID-19. This context, in the school reality, is characterized, among other aspects, by the physical distance between teachers and students. Thus, the teacher is challenged to deal with this scenario in order to carry out his teaching action, in which uncertainties and urgencies permeate her/his practice. Their students are at home and likewise live with uncertainties and fears. The demands that appear do not seem to be answered by the beliefs and activities in progress. What was being done seems not to be sufficient to account for what is presented; new challenges and perspectives in relation to current knowledge are presented. In this sense, we can think that the pandemic gives rise to a process of reorganization of the current practices.

Thus, we live in a moment of crisis, of a certain malaise in society, signaling the need for a redimensioning of beliefs. Morin (2005) argues that situations that emerge at the heart of society come from the subjects' ways of being and proposes a path, based on the understanding of the complexity of the human experience traced by self-analysis, self-criticism and self-responsibility.

We start from the assumption that, in order to understand and bring about alternatives for overcoming, we need an ecologization of knowledge, based on a system that can enable the emergence of transformations. According to Tardif, "(...) the relationship of teachers with knowledge is not reduced to a function of transmitting knowledge already constituted. Their practice integrates different knowledges, with which the faculty maintains different relationships. It is possible to define teaching knowledge as plural, formed by the amalgam, more or less coherent, of mastery from professional training and disciplinary, curricular and experiential knowledge". (TARDIF, 2012, p. 36).



Figure 1
OLIVEIRA, Lucila Guedes. Redes construídas, 2020.

That thought marks the place of understanding of their practice, reverberating the expertise and know-being. Given these considerations, the study we present, of a qualitative nature of the phenomenology of complexity, with the method of Bernard Charlot (2000), for the process of understanding the feelings of teachers in contemporary time, seeks to express ecologies of knowledge, in order to weave a network of concepts to rescale the concept of being a teacher, conceiving it from yourself.

Paulo Freire (1996) points out that the world is not. It is being on the path that is underway, considering the time and space in which the subject is inserted. Thus, we take Figure 1 as a mobilization, in order to trigger a more critical look, a reflexive attitude, understanding what it reveals and the feeling it brings us. Therefore, consider that an image has its meaning and expresses a message.

According to Carney and Levin (2002), the image in favor of reflexive learning in relation to teaching is an important complement to the interpretation and perception of the subject, facilitating the process of learning, since an abstract concept becomes associated with a graphic element. And, according to Blight (1998), the image can bring benefits, not only for the student, but also for the teacher, with visual perception of the studied concepts. What does the image in Figure 1 reveal to us? What does it instigate us? How does it touch us? Does it disturb? Like the pandemic, it can be understood as encouragement for resizing, so we propose that this image can be an inspiration to think about ways of transforming current practices.

Therefore, we call attention to the relationship with current knowledge and the image: that expectations and judgments concern over, at the same time, the meaning and the social function of knowledge and school, the discipline taught, the learning situation and ourselves (CHARLOT, 2000). The relationship with knowledge is the correlation with the world, it is the (organized) set of relationships that an individual maintains with everything related to 'learning' and knowing with the other and with

her/himself; it is, therefore, the relationship of a human being confronted with the need to learn (CHARLOT, 2000).

In other words, in the face of what we are experiencing, because of the current moment of the pandemic and of what the image presents us, inspires, unleashes, what emerges? What ecologies can we build between what we know and live and what the image inspires and instigates us?

The built networks are an image that invites us to dialogue about possible and persistent constructions in the complex fabric of education. The hands that open up to the new create scenarios of multiple experiences of knowledge for the (re)invention of education in the pedagogical plan. The lines are drawn and redrawn in the space created by the movement of the hands. Forms are self-organizing systems. Learning in this movement plays with the senses, generating inclusion and exclusion as solidary references.

We will take the concept of complexity as the guiding thread for building our reflections, understanding it as a regulating principle of thought and action, capable of articulating relationships, connections, interactions, in addition to helping us organize thinking to better understand reality, in order to see objects relationally, inserted in their respective contexts and dependent on them. As Morin supports, this thinking leads us to reconnect, in the domain of thought and action, what is already, directly or indirectly, linked in nature, in the organization of the material world. In this way, complexity does not lose sight of the reality of phenomena, does not separate subjectivity from objectivity and does not exclude the human spirit, the subject, culture and society (MORIN, 1996a).

2. The threads that weaves the pandemic scenery

The context of COVID-19 affected the need to solve problems yesterday, today. The misunderstanding about reading the context has displaced us to walk and build other goals for educational and social reform. The reasons are built to constitute the hope of living in a better world, suggesting attitudes that benefit society as a whole, valuing the recognition of difference. Boaventura alerts us to possible alternatives, considering that "(...) societies adapt to new ways of living when this is necessary and felt as corresponding to the common good. This situation is conducive to think about alternatives to the way of living, producing, consuming and inhabiting in these first years of the 21st century". (BOAVENTURA, 2020, p. 29).

The questions raised in this study run through the idea that the pandemic causes us to perceive our place in the earth-house, in the sharing of affections and knowledge, putting thoughts into movements (events). This possible future stimulates the process of (re)invention of oneself and the world. This mutual relationship privileges the neighborhood, the communities and the home itself as territories for (re)meetings.

The 21st century virus motivated social isolation, and certain restrictive measures guided by public authorities and the World Health Organization (WHO) affected educational processes and other sectors of society. The feeling of fear of the flu virus that, after decades, has returned to the contemporary scene, places biological and social discourse as a phenomenon in the fight against the pandemic.

According to UNESCO data (2020), at the height of the pandemic, around 1.6 billion students in 190

countries left classrooms, representing more than 90% of students worldwide. A scenario is established that marks the greatest educational break in history. For educational institutions, a common recommendation was the possibility of not revoking activities, but making teachers and students work together, using digital resources for pedagogical communication. The United Nations Children's Fund (UNICEF) highlights that it is vital that pupils continue their learning from home, using all possible channels, radio, television, internet and cell phones (UNESCO, 2020). Circumstances that require adequate actions for each situation experienced in their daily lives, in order to avoid exclusion, even considering the fact that many of them do not have access to the internet or a device for their studies.

In fact, what happened is that the routine chores of life put aside the immediacy, making room for memory, affection, the desire for solidarity and acts in addition to the planetary care. In this perspective, the concept of creation and work took on a new dimension to understand life, the nature of power and the diversity of knowledge.

The scenario is favorable to the changes experienced in the narratives of humanity, woven into the devices of production of subjectivity that coexist with languages and learning experiences, expressing epistemological partnerships in this time of distance/presence along with articulating to politically emancipatory tasks. In this way, we have reached ethical-political crossroads, imposed by certain reflections, including what we intend to be, do and hope at this moment, besides living the pandemics that are yet to come.

3. Epistemological fabrics: education and complexity

How can complex thinking mobilize creative and emancipatory acts in education in the (post)pandemic scenario? We know that each time imposes changes in the different fields of knowledge, causing dialogues and collective actions. The threads of this context outline a tangle of ideas and involve the recognition of the object of these changes and who can lead them. To this movement, we resort to the fabrics of systemic theory, which alert us to the relational character of education and life, of ruptures and continuities. In this direction, Assmann draws the following thesis: "(...) the living organism and its surroundings form, at each moment, a single system, and any distinction about the subsystems' autonomies of that system (for example, individual learners in a learning system) must emphasize the relative character of these autonomies; that is, subsystems only exist as long as they coexist within the system set". (ASSMANN, 2007, p. 38).

From what has been said so far, the living organism is conceived as an active creator of living and open thinking, admitting new challenges and following the flow of social, political, economic and cultural transformations through forms of self-organization. It seems evident that the school is characterized as a living organism, because it has within it the subjectivity of the individualities and collectivities built in the space of interaction and language.

The COVID-19 Pandemic lived in the 21st century invites us to realize the vitality of our thinking about life processes, offering opportunities for new learning and experiences based on aesthetic and ethics. The constant crisis experienced by education has taken the pedagogical debate to understand the relationship between theory and practice. It is important to contemplate what the choices to (re)design the new paths

of education will be.

Listening to the signs of the new time implies a certain openness and flexibility to deal with uncertainties, discomforts and the unknown in relation to scientific knowledge, allowing the overcoming of beliefs, dimensioning their ethical and political character. Education is shown as a tangle of actions that, in a glance over time, left evidence and repetition.

From these deliberations, we understand that education needs to be in tune with the time lived and, in addition, permeated by a number of forms of dialogues and collective processes, concerned with the ecologies of knowledge, which provide experiences of creation and self-creation. Education, conceived as one of the fundamental processes in the subject's life, needs to construct creative formative paths, with insightful changes in its internal dynamics, generating new behaviors. It is from this understanding that pedagogical relationships are made up of layers to be known, overcoming the idea of transmitting truths and certainties. In this sense, "educating means providing and triggering processes of self-organization in people's neurons and languages". (MORIN, 2007, p. 71).

The aspect of complexity allows us to enter the internal movements of recursion, operating and providing subsidies to (re)build a new educational paradigm, which supports the understanding of oneself, the other and the world. The necessary reform of thought is responsible for generating a conception of the context and the complexity. For Morin, contextual thinking "always seeks the relationship of inseparability and inter-feedback between any phenomenon and its context, and this with the planetary context. The complex requires a thought that captures relationships, interrelationships, mutual implications, multidimensional phenomena, realities that are simultaneously regulating them), that respects diversity, at the same time as unity, an organizing thought that conceives the reciprocal relationship between all the parts". (2007, p. 22).

Contextualize pedagogical thinking is to ecologize, expressing the perspective of the teaching formative system in its entirety, which, in a way, also shows signs of crisis, raising the following problem: How to ecologize educational dialogues, overcoming the limits and facing current demands and everyday life? The epistemological turnaround outlines the critical struggle and lies in the possibility of breaking with paradigms based on certainties, without ignoring hope, interests, converted into the inclusion of the other. In this perspective, "(...) it is extremely subtle to sensitize human beings to solidary goals, because it is not a matter of 'creating awareness' in a rationalist sense, but of triggering self-organizing processes cognitive and vital - towards a more solidary world, respecting and taking as initial conditions of self-organizing currently existing". (2007, p. 66).

From the epistemological point of view, the theory of complex thinking conceived by Morin enables inter and transdisciplinarity, opening up to questions about teaching practices in the sense of transforming forces for an emancipatory education built throughout life. Thus, the complex pedagogical action reverberates in human coexistence what, in turn, enables an education based on difference and alterity, developing mindful subjects for being and an ecologized knowledge.

4. Aesthetic and ethic of network: the wholeness of being

The quotidian reflections present the challenges in relation to the knowledge of oneself, to self-acceptance, because the times of life have been resized under a routine that did not allow the reflection of life itself, of human existence. The forced stop generated a rupture that caused profound and reflexive changes. We were driven to look at journey, our experiences, teaching practice, and ourselves. Finally, for ethical, spiritual questions - in fact, for the wholeness of being.

There are great possibilities for us to look in a network process, of encounter, which, according to Figure 1, invites us and encourages us to penetrate, review the tunings, the sounds that emerge from our energies, vibrations of life itself, to the educational processes, which permeate teaching. According to the authors, we do not have the key, but we have access to the world and, mainly, to the door that is open for our self-knowledge: "When I was ten, I took my house key to school, because I came back before my parents, who sometimes worked late. One winter night, when I arrived at the door, I looked for the key and could not find it. The house was isolated. Night was falling. I had no key. I was waiting in front of the house. One hour, two hours, three hours. My parents did not arrive. I thought they would never come back. I started to cry. I felt very alone, abandoned, exiled, unhappy. Finally, my parents arrived. "Why are you crying?" They asked. "As we saw that you had forgotten the key, we left the door open." I pushed the door. It was open. I had not even thought about trying to open it without a key. I wanted to tell this story before I started just to say that I know you do not have the key. Nobody has the key. No one has ever had it. We do not need a key. The door is open. Enter your home". (LÉVY, 2000, p. 24).

This invitation by Lévy, as well as by Lucila, are interesting triggering elements of self-knowledge that reaffirm the words of Sacramento (2018, p. 62): "I understand that self-observation and self-knowledge relate to a coupling with the inner being, in a state of human wholeness". This entire state is great, it is a life process, which for Larossa reflects on the fact that education, in turn, "always has to do with a life that is beyond our own life, with a time that is beyond our own time, with a world that is beyond our own world ... and as we do not like this life, nor this time, nor from this world, we wanted the new ones, those who come to life, time and the world, those who receive life, time and the world from us, who will live a life that will not be ours and in a time that will not be ours and in a world that will not be ours, but a life, a time and a world that, in some way, we give you ... we wish that the new ones could live a dignified life, a dignified time, a world in which it is not ashamed to live". (LAROSSA, 2015, pp. 36-37).

The outsets of Larossa dialogue with Sacramento (2018, p. 59) "(...) the conception of wholeness of being, in the sense of a state of consciousness that allows one to look at oneself with legitimacy and presence in order to be with the other, in coexistence and mutual transformation". This legitimacy in looking at oneself activates innumerable situations, as it generates suffering from not accepting oneself, from not welcoming the place we find ourselves. This is the great challenge, but, at the same time, a legacy for the teaching staff to realize that dialogue is the necessary movement to recognize themselves, at first. This process has been painful and teachers have sought treatments, such as psychological, psychiatric, and therapeutic, among other forms of support. These are elements that can be of great value and help; however, it is necessary to accept this welcome from yourself, from internal movements: "I emphasize the importance of the subject's internal movements, in the search to understand and identify his way of

being: what motivates, angers oneself; their anxieties, challenges, joys. Such movements are generated when the subject is affected by the desire to know his emotions and feelings, in a process of self-observation. When this is set in motion, it establishes a mutual and dynamic interaction with its sensations and with the environment in which it operates, resulting in coordinated coordinating actions, so that it operates recurrently, with the environment, in the environment and with itself. In this flow, his structure is always molded to the domain of action in which he develops his ontogeny, so that everything he does, in the domain of his interactions, is determined by his structure at every moment" (MATURANA, VARELA, 1997 apud SACRAMENTO, 2018, p. 61).

It is necessary, as historical and ethical subjects, we do the exercise to get to know each other and understand the reasons which affect us, be it in relation to the situations that upset and distress us, such as those that make us happy, so that in this process of self-observation let us find the meaning of life and teaching. This perception allows for sensitive listening, the knowledge of oneself, of possible answers and the raising of other questions, such as: What time is it now? How to manage it? What about now? Where are we going?

4. What about now? Where are we going?

What about now? Where are we going? These are questions related to life and teaching, especially of individuals who have lost people from their families, creating a great void and insecurity. A feeling of helplessness in the face of the challenges that arise in light of the pandemic and which exceeds linear understandings, with standardized labels, but, rather, a contrast that questions the curricular components and breaks the frontiers of knowledge. In a perspective of the ecology of knowledge - "First, the understanding of the world far exceeds the Western understanding of the world. Second, the understanding of the world and the way it creates and legitimizes social power has a lot to do with conceptions of time and temporality". (SANTOS, *s.d.*, p. 3).

Regarding temporality, Santos also highlights that: "It is as if the light he projects blinds us. Suddenly, the pandemic breaks out, the light of the markets fades, and from the darkness with which they always threaten us if we do not give them a vassal, a new clarity emerges. Pandemic clarity and the apparitions in which it materializes. What it allows us to see and how it is interpreted and evaluated will determine the future of the civilization in which we live. These appearances, unlike others, are real and are here to stay". (SANTOS, 2020, *s.p.*).

The forementioned questions materialize the mediation with other learning interfaces, but mainly, "(...) the teaching subject is constituted in the flow of his operations, (...) he experiences his teaching practices, 'in his teaching life', in a way recursive, in which its structure is constantly transformed, congruently with its interactions, with itself and with its surroundings". (SACRAMENTO, 2018, p. 61).

This process ascends, according to the author, the presence in engagement with students, in learning spaces, especially when this coexistence is sought under the dimension of education for peace, and spirituality flows the empowerment of the subjects. Coupling (MATURANA; VARELA, 1997) in the sense of a process of being together in legitimacy with acceptance of the different ways of being. A process underlying the transformation of existence and, therefore, generating the processes of knowing.

Faced with these theoretical considerations, we propose to reflect on the following question: "How is it possible for the ecologies of knowledge mobilize the view of the educator as a whole, having as a guiding thread reflections on complex thinking in the face of the experiences of the teachers?

4. Methodological outline: possibilities for what is next

To build a response to the questioning, we chose to generate data by listening to female and male teachers of basic education who experienced the scenario of social isolation and were challenged to carry out their practice using the digital resources offered by the schools, as well as the entire situation that presented itself.

To support this path, we used the instrument Balances of Knowledge, by Bernard Charlot (2009), to inspire the generation of data and its subsequent interpretation. The balance consisted of the elaboration of a text based on a statement that provides a reflection on the experience of each subject educator in contemporary times. The analysis focused on the assigned meaning, evoked on the feeling experienced.

The research subjects were female and male teachers of basic education in the municipalities of the States of Santa Catarina and Rio Grande do Sul, Brazil. They manifested themselves through remote access via Google® form, comprising the term of confidentiality and consent to participate in the generation of data. For the purposes of this study, the following statement was prepared for the Balances of Knowledge: "What is the feeling of being a teacher in times of the pandemic of COVID-19? Teachers expressed themselves freely, writing about what they lived, felt and perceived.

Based on this statement, 14 basic education teachers from state, municipal and private schools participated. The Balances of Knowledge were read as a single text, which brought speeches by the teachers about their experiences in the relationship with students, in their doing and being an educator. These female and male teachers are connecting with students through digital technologies in this pandemic period.

To understand the data generated, there were "comings and goings", trying to understand in the text what those teachers lived. From this attentive and sensitive reading, some words and expressions emerged, and they were the starting point to generate a cloud-based figure, which means the dimensions that emerged from ecologizing the being and making teachers in the year 2020, in the voices of female and male teachers who contributed to the data generation.

Thus, Figure 2 expresses the cloud-based image, which was created using the digital mentimeter environment in an interactive way, in which the size of each word expresses how much it was referred to in the voices expressed by the teachers participating in the study.



Figure 2. Cloud-based words.

Word cloud: Emergencies of being and teaching in the context of the pandemic.

Source: The authors (2021).

The word and its meaning are fundamental to think about how we inaugurate the process of change, of greening, about the paths of knowledge and learning. The most promising direction is the recognition of oneself and the other in the formative process, to create dialogues contained in the word cloud as a generator of meanings, for the continuity of an understanding of the echoes of the voices of the teachers – feminine and masculine –, as shown in Figure 2.

Thus considered, according to Munzner (2014), the image assists the subject in perception and expands the capacity of human cognition: by communicating over visual language, which allows realizing, interpreting information, as well as facilitating the process of knowledge discovery in large complex systems. In addition to designating something which, while not always referring to the visible, borrows some features from the visual and, in any case, depends on the production of a subject: imaginary or concrete, the image passes through someone, who produces or recognizes it (JOLY, 1996).

From the image that presents the words that reverberate in the displacement of the teaching being-knowledge in the learning processes, networks are activated with forces to emerge in their constitutions. The data that weaves the time lived with the uncertainties subtly imposes the identification of the place of the pedagogical weaknesses and fragilities, leading to a complex discerning to deal with the lived situations.

Words expressed in the cloud – such as *technologies*, *challenges*, *possibilities*, *alternatives*, *knowledge* – act as forces to find, in a self-organizing process, conditions for the (re)invention of educational practices, interweaving school period with the time lived by the subjects and their knowledge.

5. Discussion and analysis: the emergencies of Balances of Knowledge

After the analysis of the statements in the Balances of Knowledge, the dimensions of emergency relations

emerged the associations with the knowledge of uncertainty, of challenges and of change. Thus, in Figure 3, some of the statements of female and male teachers in relation to their emergencies, in which there was a transition in the approach of being and doing physically, in person, to be and do through digital technologies.

Relations with the knowledge of uncertainty

- (...) unfolding, innovating, rediscovering and not being sure if or how many students will be reached.
- (...) of innovation, wealth, increased baggage, flexibility, knowledge has not plastered, but has undergone mutations in the ways of learning and teaching.
- (...) urgency in adapting the education model, with new formats that guarantee meaningful learning for students and that also help the teachers' journey.
- (...) the displacement of the gaze from the content to people emerges the construction of new meaningful fabrics with opening to the world.

Relations with the knowledge of challenges Challenge. I had to learn to work in different ways, learn to deal with different technologies, learn to connect with my student, even at a distance and in a virtual way.

It made it possible to think of new forms of work, as the school remains with its system stagnant, while

several other segments of society have advanced in the technological sense.

Challenges, insecurity, uncertainties, physical nostalgia for students, enabling new learning, reflections and new perspectives.

Challenge. I had to learn to work in different ways, learn to deal with different technologies, learn to connect with my student even from a distance and in a virtual way.

Relations with the knowledge of changes The tools are innumerable, but one must constantly challenge oneself to move forward, to make mistakes and to return, changing traditional practices, allowing oneself, asking for help and working in partnership.

Commitment to the truth, about the virus, without ideologies.

(...) it is about reinvention, in the sense of doing it differently.

Figure 3. The Voices of Emergencies: Teachers' speeches regarding their emergencies.

Source: The authors (2021)

These relations of threads emergencies intertwine and stand out in a broader two-way perspective, so that, in the first, Charlot points out, based on the norm: "(...) there are ways of learning that do not consist of appropriating knowledge, understood as content of thought; second, while trying to acquire this type of knowledge, other relationships with the world are also maintained". (CHARLOT, 2000, p. 59). The second, in its turn, is exposed by the premise that consists "in the fact that any attempt to define a pure subject of knowledge forces, *in fine*, to reintroduce other dimensions of the subject in the discussion. Symmetrically, any attempt to define 'knowledge' raises a subject who maintains a broader relationship with the world than the relationship of knowledge".

Such connections emerge recursively, what means in each new cycle a new learning takes place and refers to the figures of learning, which are established by the need to learn in the face of the world that presents itself, in addition to the ruptures that arise. According to what Charlot (2000, p. 67) proposes,

there is "the most radical question: what kind of activity is learning? To analyze this point is to work on the relationship with knowledge as an epistemic relationship". By "subject of knowledge" we mean, here, the subject who dedicates themselves (or intends to dedicate) to the search for understanding. To do so, learning "requires an intellectual activity and only one who engages in meaning is engaged in an activity" (CHARLOT, 2013, p. 146).

The sense of being engaged means dedicating attention with pleasure and being deeply involved in what you have proposed in the activity of learning, which thus generates empowerment. People can commit to undertaking many activities, such as sports, hobbies, jobs and studies; however, the better people feel about what they are doing, the more focused and willing they be to do it well.

The remote regime is, in turn, a temporary emergency measure organized to fulfill the need for social distance. In this type of management, pedagogical coordination and teachers interact with students over the internet. One of the alternatives found was the online class, in which teachers and students need to connect at the same time (synchronously), on the same days and times as the face-to-face classes. Although it seems simply a change of "location", remote education creates the need for tools to assist in the teaching and learning process, as well as the promotion of technological appropriation for teachers and students.

Using the digital culture system is vital in times of social distance, given the different possibilities that are created by digital social networks. In order to be present in the rapprochement relationship between the subjects of the educational system, they promote and facilitate the meeting and communication concerning the subjects, such as, for example: groups on WhatsApp® and profiles for movements of directions, guidelines and information on Facebook® and on Instagram®, in addition to promoting video calls, using school management systems, from which it is possible to obtain monitoring of the school universe as a whole, with different computational languages, representative images, graphics, material production, records of perceptions of the teachers, families and students.

These aforementioned aspects mobilize collective intelligence, which, for Lévy, (2015, p. 29), consists of "an intelligence distributed everywhere, unceasingly valued, coordinated in real time, which results in an effective mobilization of competences". Collective intelligence values and maximizes human diversity, so that the space of knowledge, in this perspective, is effective in human relations and dialogical guidelines. Thus, it constitutes a look at the daily life of Education with regard to involvement and participation that can expand interaction, teaching and learning between subjects.

Hence, such adherence instigates an important role in all dimensions of life, in which the protagonism of the individual arises from satisfaction with the action of and in the world of being with the innumerable relationships, in order to deal with the challenges prompted. It also provides opportunities for learning from the new, the different, represented by the demands ascending from the presence of social isolation, because of COVID-19. New ways of teaching and learning are pointed out, that is, of doing, seeing and creating, to be and stand, therefore to ecologize the educational processes based on recurrent and recursive interactions.

6. Conclusion, closing remarks

What is expected from post-pandemic education? Although the ecology of knowledge has been addressed in the emergence of complex thinking, in a way the importance of recognizing a new educational paradigm has always been evident. Throughout the interaction between the researchers in this article, woven threads often created a tangle around uncertainty and fragility in relation to reading the context of the subjects involved in the educational processes.

The pandemic, by triggering movements to reorganize ways of being and standing, inspires several movements (events): self-knowledge, the complexity of life, enabling dialogue and collaboration, in addition to empowering individuals. Teaching, from this perspective, is a co-creation space for new processes of knowledge ecologies.

This legacy is shaped by art, dance, feelings, limits, dreams, self-knowledge and human subjectivity. Teaching, by recognizing these aspects, enables the greening of knowledge and co-creation.

The study points out some important results to build collectively ethical, caring and spiritual narratives strengthened in the social body. In this perspective, teacher education opens space for language, for protagonism, escaping the alienation generated by hegemonic relations. Thus, it must break (without denying) institutionalized models, ceasing to be configured in the service of the system. Therefore, it must be built in a shared way among peers and marked by epistemological and aestheticized partnerships. The identification of teacher training as an object of study in constant action/reflection/action, dimensioned by the understanding about pedagogical trends, needs to overcome the recurrence of empiricism, including learning, "with a view to building a world where everyone can fit". (ASSMAN, 2007, p. 113.) Then, there is an understanding about the different backgrounds and circumstances, so that it is possible to problematize about which displacements should direct our choices.

The world invites us to flexibilize and create. The question is how we are captured by the sound, by the collection of the world, the result of the different images that, in a way, we chose to compose our narratives. These narratives are legacies that we build and leave to the new generations.

Knowing how to read images is a requirement of contemporary society, given the amount of information that is conveyed to us through this language. Knowing the visual grammar makes us able to read and interpret pictures with awareness.

It is important to highlight the humanizing aspect of the school, of welcoming, as a foundation, with the objective of including one and all in the maintenance of teaching in the context of the pandemic, in a creative look that crosses being. It is proposed to seek strategies for engagement with the entire community, to enable the largest number of people included in the learning process. Moreover, the reception of presence, in turn, is only possible when considering the social reality in decision-making and action planning. Empowerment, mutual support and collaboration are strategies that strengthen the entanglement of the school community.

In short, in understanding of these reflections, emerged as fundamental dialogues and exchanges of experiences between researchers, students, educators and other individuals in transdisciplinary studies, about the relations with Education, with mutual respect regarding different cultures, in the different dimensions of being, whether ontological, ethical, epistemological or aesthetic. Still, we can infer that the

dialogues built in co-creation need to have complex thinking as a strategy to (re)invent teaching practice, from the wholeness of those involved, based on mutual respect and the empowerment of these subjects.

May the image of the figures we present show us new ways to co-build knowledge and practices, as human beings living together, so that, with mutual respect, we can generate a society in which we can feel welcomed and live fully.

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