

Integrating emotions and rationalities for the development of competence in active learning methodologies

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This paper discusses a rationalist/objectivist tradition of teaching and learning, with the support of a constructivist, dialogic and competence-based educational practice. Artistic expressions, particularly cinematographic ones, are presented as educational triggers. Students are organized into small groups in which they share, correlate and discuss their emotions, allowing for a better understanding of the rationalities involved in the learning process. As the groups present different stages of problematizing their emotion, we propose categories to support teachers and members in identifying the conversational nature of the groups, supporting their interventions and contributions for the individual and social development of the participants, with reference to a proficiency profile.

Keywords: Active learning. Professional competence. Education. Emotions. Art.

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Introduction

Nowadays, we have been experiencing important educational dilemmas that, however evident they may seem, maintain educational discourses distant from educational practices. If, on the one hand, reflections on the need to transform teaching and learning models targeted at the full development of students have been amplified, on the other hand, we still witness the preservation of a teaching tradition indifferent to new discoveries about how people learn.

The purpose of this article is twofold: to contribute to expand experiences that effectively improve educational conditions and results, and to discuss the inclusion of emotions in educational activities, demystifying the historical dichotomy “reason and emotion”. Thus, we propose constructivist and dialogic methodological devices capable of accessing these two dimensions in an interconnected way, both in the learning process and in the development of competence.

The privilege of rationality

The privilege of reason has its roots in philosophers from ancient Greece, like Plato, who valued universal thought to the detriment of individual passions, pleasures and values. It is present in the production of René Descartes (1596–1650), who considered existence from the act of thinking, and of Immanuel Kant (1724–1804), who stated the impossibility of the encounter between reason and happiness^{1,2}.

From the last decades of the 17th century onwards, the increasing importance attributed to science started to influence education. This influence produced expressions that varied from scientificism, through denial of any form of knowledge outside reason, to tendencies that attempted to reconnect science and culture³.

The epistemological model based exclusively on reason dates back to the very emergence of modern scientific thought. Objectivity has devoted itself to the accurate unveiling, discovery and manipulation of the object, with the unceasing attempt to remove the observer’s interferences. It has been valued since the construction of the

analytical method, and was acclaimed in the 19th century, in the so-called Vienna Circle, the cradle of logical positivism. The search of a unified language for science depended on a reification of the object and on a precise effort to understand it⁴.

The philosopher Rorty⁵ names the positivistic tradition objectivistic. To this author, western culture has focused on the search for “truth”, present since the Greek philosophers. It is the clearest example of the attempt to find meaning for existence, based on the denial of emotions towards objectivity. To be considered rational, justification procedures must lead to the “truth”, to correspondence with reality, to the intrinsic nature of things. This objectivity is not constructed by means of the understanding of ourselves as members of some real or imaginary group; rather, it is built by our bond to something that can be described without reference to any specific human being (p. 37).

The influence of this positivistic model on the modus operandi of science and the fact that it is continuously fed by education reaffirm the myth of objectivity, which was established as a key element in the constitution of contemporary professional activities, especially by means of bureaucratic systems and the technicist tendency of education. Objectives applicable to observable behaviors, generalizable rules of conduct and practices search for an objective impartiality that aims to ‘exclude’ the observer’s interferences on the object, favoring control and standardization¹.

After formal education started focusing on science and rationalism, educational practice remained centered on the teacher and based on repetition, discipline and control.

An old tradition in educational practices

In the schools of western societies, the ideas and values of classical pedagogy prevailed, without being questioned, during the Middle and Modern Ages, until the middle of the 18th century. This tradition was consolidated by medieval scholastic education, which intended to reconcile faith and reason, and by the Humanism and

Enlightenment thoughts of modern age (1453–1789), which prioritized reason to the detriment of religion^{1,2}.

The Enlightenment values praised individual freedom and opposed the obscurantism of the Church and the despotism of absolutist governments³.

As a reaction to the previous period, in which power was highly concentrated on priests and nobles, rationalism attempted to free thought from the repression imposed by fear of the unknown and of the supernatural. In this sense, the substantiation of scientific discoveries and the conquest of other continents expanded the value of experience and the role of objectivity as foundations of reason and counterpoints to belief and the supernatural.

Meanwhile, in classical pedagogy, students' needs, fields of interests and sociocultural context did not influence the selection of contents, as teachers already knew what should be taught and all the answers to presupposed questions^{1,2}.

Only at the end of the 19th and beginning of the 20th century did the movement called “new pedagogy” or “new school” start to show the limitations and inadequacies of classical pedagogy and the importance of using methodologies based on experience and on students' proactivity. Although innovative because it was centered on students' needs, the new school movement had a low adherence compared to the traditional model, due to changes in the roles of teacher and students and in their relationship, and also to the need of reducing the number of students per classroom and increasing the number of available educational resources^{1,2}.

Science and health education

The areas of knowledge that imply making interventions in the world, beyond the objective of knowing, can be considered areas of “applied science”; in them, general rules must be adapted to “concrete situations”¹ (p.362). In this context, professions whose practice represents an applied science, which involves the affective dimension of people and their relationship with the world, should value the

development of students' cognitive and affective capacities by means of an approach that enables interconnecting the multiple dimensions involved in labor practices.

In the field of health, there is tension between the conceptions of basic and applied science. The positivistic tradition of basic science hinders the recognition of the transversal and founding elements of human behavior that are connected with the biological tradition and cross the health–disease process. Thus, as important as the needs connected with the biological dimension are those related to the subjective and social component that condition both health production and people's illnesses.

Although we can recognize movements that induce the education of health professionals with a holistic profile concerning comprehensive care⁶, this process has difficulties in generating answers with the necessary speed to face challenges in the world of labor. Therefore, the qualification of professionals to work in the healthcare system has been an indisputable demand for people management.

To face the challenge of qualifying health professionals for the labor world, there are educational initiatives targeted at the development of new capacities, in the scopes of undergraduate⁷ and postgraduate programs⁸. These initiatives aim to expand the understanding of health–disease phenomena and the possibilities of intervention in them, in order to promote comprehensive care.

The integration of human dimensions

In the wake of the recognition of emotions as an integral part of the way in which human beings relate to one another and produce their culture, we can identify some authors who, through investigations and interventions in the fields of pedagogy, psychology, medicine and sociology, have brought new evidences about the participation of emotions in the learning process. Although there are differences among the conceptions that approach emotions in this process, we highlight two consensuses: the value attributed to the exploration of the emotional dimension in human interactions and the importance given to the inseparability between the affective and rational dimensions. In this context, Piaget's, Vygotsky's and Wallon's

psychogenetic theories have played an important role in the valuation of emotion in human development and learning⁹.

To Piaget¹⁰, affectivity and morals conjugate harmoniously with reason and, in this relationship, he highlights that “(...) every conduct, no matter which, always contains an energy or affective aspect and a structural or cognitive aspect” (p.266). According to this author, affective development, just like the cognitive one, occurs in stages that construct moral character, in a relationship between the subject's autonomy and the social rules¹¹.

Vygotsky¹², on the other hand, highlights the historical and social character in the development of emotions and explores the mutual influence of cognitive and affective processes. According to Rego¹³, to this author, the “[...] individual's desires, needs, emotions, motivations, interests and inclinations originate thought and this, in turn, influences the affective-volitional aspect” (p. 122).

In a more specific way, Wallon¹⁴ differentiates emotion from affectivity. To him, emotions present a fundamentally organic component in the interaction between subjects and the environment, and are capable of producing impact on other people and of propagating themselves in the social environment; affectivity, in turn, is simultaneously social and biological, and the deepest form of learning occurs when there is affective involvement¹⁵.

This theoretical framework grounded the interactionist theory of education, which explains the phenomenon of learning through the interaction between subjects and the world¹⁶. According to this conception, both reason and affectivity are constructed by means of the interaction among subjects and between them and the world. From this interaction, reason and affectivity are transformed and reinvented as entities that are distinct and, at the same time, inseparable¹⁶.

More recently, authors from the field of neuroscience, such as Damásio¹⁷ and LeDoux¹⁸, and psychology, like Fridja¹⁹ and Goleman²⁰, furthered the study of emotions, viewing them as a constituent component of people and an integral part of the teaching and learning process²¹. Although these studies bring new information about the phenomena and mechanisms that underlie the interaction between emotion

and reason, Maturana²² argues that we belong to a culture that still confers a transcendent validity on rationality and attributes an arbitrary nature to emotions.

In the heart of this and other tensions – for example: objective–subjective and science–art –, the theory of complexity emerges. According to Morin²³, it connects, contextualizes and globalizes knowledge and perspectives that, up to this moment, had been considered antagonistic or ambiguous. Thus, complex thought enables to articulate disciplines and dimensions in a systemic and holistic way, and treats aspects of a certain phenomenon that are apparently antagonistic as complementary.

Devices for the emotion–reason integration

The choice and organization of devices for the emotion–reason integration are grounded: (i) on interactionist education, which recognizes emotions as an integral part of people, who relate to one another and produce culture; (ii) on active methodologies, which require students’ proactivity, engagement, collaboration and cooperation in the learning process; (iii) on significant learning, which implies the construction of meanings in view of a certain “object” or content; and (iv) on complex thought, which requires a dialog between dimensions that are apparently antagonistic and contradictory. In this context, learning is a process that leads “[...] to integration, modification, establishment of relations and coordination of knowledge schemes that we already have, which possess a certain structure and organization that varies, in bonds and relationships, every time we learn something”²⁴ (p. 20).

Based on this framework, we highlight a device that favors the expression of emotions that underlie rationalities. Cinematographic art associated with the use of active methodologies, in a dialog with the professional profile, is the basis of the activities called “educational journey”. These activities have been used with three main purposes: to reveal emotions and feelings; to identify the impact that emotions produce and their articulation with rationalities; and to make emotion–reason interact with the professional competence profile in qualification processes.

Compared to other methods, the use of films has become a profitable field of studies, with advantages highlighted by many authors^{25,26}, such as: they can be easily applied to an educational scenario; some parts have the potential for producing subjective and even physiological alterations; cinematographic scenes have a broad and dynamic scope, providing a simulated model of reality without the ethical and practical problems of real life.

A meta-analysis performed by Westermann, Spies, Stahl and Hesse²⁶ has shown that, compared to other techniques, film clips are more powerful as inducers both of positive and negative moods. The slightest disturbance in our retinas, eardrums, or even the visit of an unexpected memory may trigger instantaneous emotional alterations. And, with them, the possible operations over the new configuration that is established in the nervous system are altered. Fear, joy, solidarity, disgust, envy, jealousy are a few of the many emotional states that can emerge in this interaction.

The choice of the term “educational journey” aims to potentialize the idea of singularization expected in each student’s interaction with the trigger used in the educational activity. The term also encompasses absolute respect for the singular interpretation and associations performed by the participants, towards the broad understanding that they originate from the schemes the “subject” constructed in previous experiences²⁷.

In the majority of times, the triggers of the journeys are films chosen by teachers according to a certain educational intention, but other devices originated in the creativity and talent of the students and teachers involved are also used, such as dramatizations, musical productions, dance and poetry, among others. When the trigger is a film, the activity is called cine-journey; for devices that involve participants’ body or sensory expression, we use the name installations²⁷.

In this educational action, we highlight five characteristics that favor the integration between reason and emotion. The first: the real dimension ceases to be a petition for obedience and becomes a possibility coordinated in language. Regarding pedagogical practice, the focus shifts from the teacher and his/her instructive transmission to knowledge construction, which integrates different constitutive

dimensions (emotional, historical, cultural) both of the student and of other individuals involved in the educational dynamics²⁸.

The conversational process is a fundamental substrate for tensioning what is already known and for making new conceptions emerge. When the focus leaves the object and lies on interaction, the form of evaluating the efficacy of the educational process ceases to be the student's closeness to an ideal, omniscient, universal knowledge and becomes an evaluation of the mobilization of his/her capacities to face, successfully and in a contextualized way, the problems of practice²⁸.

The second characteristic is confidence in the development of students' capacities to learn how to learn and of students' critical and reflective reasoning. This posture frees teachers from the need to transmit fully all the contents considered necessary and favors the offer of activities that expand the search for information, associated with a critical/reflective analysis and contextualization of this information. It does not mean giving up educational intentionality, nor the organization of activities, nor the preparation of triggers of the teaching-learning process. However, it requires that the focus is shifted from contents, which are exclusively selected by the teacher, to students' learning needs, according to the problems to be faced^{12,22-24,29}.

The third one is the utilization of context as a resource to potentialize significant learning. This articulation is supported by the recognition of the usefulness of the knowledge that will be learned and by the possibility of transferring these learnings to a new situation. In the format of prevalent situations in the professional exercise, the educational challenges must be presented in the way they occur in daily life^{21,23}.

The fourth characteristic is the simultaneous development of capacities for using the scientific method and for identifying and understanding the emotions, values and preferences that underlie our rationalities and enable to access and problematize previously established cognitive and emotional schemes. As an isolated element, it can be considered the most influential component in the learning process^{14,22,24}.

Lastly: the use of metacognition learning strategies favors the recognition of facilities and difficulties, allowing a singularized approach to monitor the development

of each student, although a large part of the process occurs in small groups, in which collaboration and cooperation express the investment in the construction of new rationalities and feelings by means of interactions²¹.

The movements of the educational journey

The educational journeys are developed in two movements: the first one, in a large group, aims to expose the participants to the experience; the second, in small groups, aims to enable participants to share emotions and feelings mobilized by the activity. In the first movement, the activity focuses on the mobilization of emotions, considered body actions that can be externally observed, as they express a set of alterations in the body's physical state. For example, in the participants' breathing, circulation, voice, facial expression or in other body postures. In the second movement, the focus is on the participants' feelings, which represent the invisible experience, of a mental nature, related to the perception or interpretation of the emotions expressed by body actions.

It is important to mention that not all feelings come directly from emotions, as, beyond the perception of the body state created by objects or situations, they can also derive from subjectivity in the contact with objects and from the thoughts generated in this process¹⁹.

Whenever possible, we suggest that the first movement should be the last activity on a certain day, and the sharing, the subsequent activity or the first one on the following day. Sharing the journey on the following day aims to promote a brief individual space for reflection, without losing the "heat" and memory of the mobilization that unfolded through interaction with the trigger.

The utilization of small groups to share the feelings triggered by the journey aims to amplify the possibilities of interaction among subjects, based on a certain content accessed by emotion. The small groups are learning communities, monitored by teachers, which develop activities in an educational program. As these activities involve collective work, it is necessary to establish pacts for the didactic work. The

pacts must emphasize the promotion of a safe environment of mutual trust, particularly favorable to the sharing of emotions and feelings, in which what is said is confidential.

In operational terms, the teacher must initiate the moment of sharing with instructions related to the record of emotions or feelings. He/she must ask that each student records, on a sheet of paper or on a colorful cardboard, one or few words that express his/her emotions and/or the attribution of meanings the trigger promoted. Only after this record do the participants express verbally the associations or interpretations represented by the recorded words. The facilitator's role is important to ensure that all the students have a space to speak and are respected while they share the meanings that were perceived or are under construction.

The sheets or colorful cards, which, by themselves, express diversity, should be fixed to a board or panel, which can be the wall of the small group's classroom. The attachment of tags plays the role of amplifying the "visibility" of emotions. There is no specific order or categorization for this. As this visual resource is also used in activities that mobilize predominantly the cognitive domain, the use of cards or tags to record emotions acquires, by means of this resource, the same status of the hegemonic and privileged domain.

In addition, the board expresses that that set, although individually originated, has started, in some dimension, to belong to the group. Thus, the next movements are fundamental and define the way in which the group relates to the expressed contents.

Each one of the members explains the words or expressions he/she chose to represent the emotions and feelings triggered in the contact with the artistic production, aiming to make them become more conscious and reflective. Questionings about the pertinence of the exposed feelings are discouraged. This aims to foster an increase in the degree of freedom of speech in this activity. However, the impact that the other participants' emotions has on each one can and must be shared. From the recognition of the emotions' propagation character in the social environment, each one of us build ourselves in the interaction with others and, by means of this interaction, we can construct ethical standards of social coexistence.

Beyond the sharing of emotions and feelings, the reflective process can become denser when, at the end of the activity, the teacher asks the students to write an individual reflective narrative that connects the reflections produced with the proposal of competence profile that guides the educational activity. This narrative is usually shared with the teacher in specific moments, destined to monitor each student's portfolio.

A pedagogical approach to support the sharing of the journey

Based on the repertoire we constructed through the sharing of educational journeys, on the taxonomy of the affective domain proposed by Krathwohl et al.³⁰, on the realms of meaning created by Phenix³¹, and on the experience of other authors regarding humanities contents in health education³², we present an approach to support reflections on emotions and rationalities.

Unlike the taxonomy proposed by Krathwohl et al.³⁰, which is a hierarchical categorization of the affective domain, the realms of meaning created by Phenix³¹ bring the idea of categories that coexist in a complementary way. Considering these two references, we constructed a set of categories to support the identification of the nature of the conversations of participants and groups that explore their emotions and rationalities. The recognition of these categories favors the identification of learning needs, in light of a given professional profile, under permanent construction.

Thus, in the individual and group spheres, the nature of conversations in the sharing of educational journeys can present, predominantly, a character that is:

- Descriptive – when students describe or review the trigger. Although we recognize that, even when we describe a situation, we select what we report, this narrative tends to reveal a superficial perception of feelings and of the extent to which emotions interfere in our rationality, or else, how our rationality is used to justify or deny our preferences, and we are not even aware of this process;
- Symbolic – when the sharing occurs from an identification of meanings that the trigger supposedly contains. There is an attempt to interpret the author's intentionality, or

that of the educator who selected the trigger. Students establish a direct correlation between elements of the trigger and what they consider that should be interpreted, without expressing their own judgement;

- Evaluative – when students share their critical positioning in relation to the situation approached by the trigger or to the characters' behavior, comparing them to their own set of values. In this pattern of sharing, the student expresses his/her judgements, attributing values to phenomena or behaviors that involve moral knowledge and personal conduct and that favor the recognition of the relationship between rationalities and emotions;
- Reflective – when, in the sharing activity, a dialog occurs between the knowledge one has of oneself and the trigger. In this nature of sharing, the students' own values are recognized and, at the same time, tensioned and shifted, so that they amplify their capacity of identification and understand values that are distinct from theirs. The reflective possibility tends to problematize the relationship between rationalities and emotions, favoring the acceptance of a diversity of values and the illumination of blind points;
- Emotional reflective – when the sharing reveals underlying feelings triggered by the propagation of the emotion of other participants in the activity. Beyond the students' own values and reflections, they reflect on feelings that are preserved in the relations, enabling the recognition and a metalanguage exercise about emotions, in order to construct a dialog with the values brought by the collective of participants in the sharing of their emotions and feelings.

In this activity, the teacher must support the group in the recognition of the aspects that predominate in the sharing. This problematization favors the identification of facilities and difficulties in the exploration of the emotion–reason binomial and promotes the development of a collaborative autonomy among the participants that enables to reveal the emotional principles that underlie the group's culture.

This approach does not intend to exhaust the possibilities nor to construct a hierarchy among the categories; rather, it is an attempt to support teachers and

participants in the identification of potentialities, limits and challenges in the exploration of the emotions and rationalities constructed in the previous trajectories and those that are undergoing a reconstruction process, considering the development of a professional competence profile.

The journey's potential as an educational activity

It is in the creation of conversational spaces, based on the trust in language's potential, that the pedagogical activity presented here is structured. These spaces are instituted in the expression of diversity, in the respect and importance that are given to it, and in the legitimation of the other in the interaction. According to Wallon¹⁴, "there is no concept, as abstract as it can be, that does not imply a sensory image, and there is no image, as concrete as it can be, whose base is not a word (...); it is in this sense that our more individual experiences have already been shaped by society" (p.223). Thus, in the educational journeys, we explore the role of esthetics and art in students' education, and problematize the inseparability between reason and emotion in the construction of the ethical and professional identity¹⁴.

In relation to the role of art in professional education, Castro³³ highlights the phrase of the philosopher Nietzsche: "We have art not to die of the truth" (p.2). In this same direction, Guattari³⁴ argues that the paradigms of technoscience emphasize an object world of relations and functions, and put subjective affections in parentheses, in such a way that what is finite, delimited by coordinates, is always there, to take precedence over the infinite of their virtual references. On the contrary, in art, the finitude of sensitive material is converted into support for a production of affections and percepts that tends to get away from preexistent marks and coordinates.

Beyond the considerations that evidence art's potential for improving the human condition, be it individual or relational, every proposal of students' contact with an art production carries with it a pedagogical intentionality. However, although the educational objectives of the use of a cinematographic work can be expressed, this proposition is inherently devoid of any predictability about the future reflections that

the group will make. When the group members watch a film, a documentary or any other artistic production, they construct a mosaic of expressions that records a set of perceptions that the teacher does not control. In contrast with a technoscientific text, which contains universalizations about a given matter, a cinematographic or similar work does not contain a preexistent “truth”. Different conceptions emerge, naturally, from a reflective observation. The endless blind points of each one of the members are gradually illuminated by the light of the others’ eyes. From the shared views, new realities are constructed; perceptions and emotions are consensually coordinated in language.

In this sense, Maturana²² distinguishes as objectivity, in parentheses, the ontological domain in which reality is an explanatory proposition. No external disturbance has the potential for specifying internal changes. It only triggers alterations determined in the very structure of the one who observes. Each one of the interactants of the dialogic process has a story, previous cultural interactions and, especially, a flow of changing emotions that determine the distinctions and perceptions that emerge in the conversational space. In this proposal, the group members start to deepen the relationships and amplify their potential for recognizing the emotions that underlie and are preserved in the interactive activity.

Regarding the scenario to share the emerging emotions, its organization in small groups arranged in circles translates a collective configuration that is conducive to horizontal expressions, which value human solidarity and collaboration. Compared to conventional education models, in which the teacher generally plays an outstanding role in the front of the classroom, while students are organized in rows and their eyes move between the teacher and the back of their colleagues’ neck, the organization of the scenario in a conversation circle translates, in itself, an educational intentionality. The configuration in a circle, which includes the teacher, brings elements that favor revisiting what Maturana³⁵ has called “*pegajosidad biológica*”, which we have freely translated as “biological stickiness”, that is, the pleasure of the company that results from our phylogenetic drifting. To this author, our species is the present of an evolutionary story of 3.5 millions of years of sharing: of recurrent encounters and

interactions sustained by collaborative emotions, of acceptance of the other as a legitimate other, in the coexistence space³⁵. In addition, he highlights the emergence of language as a process of coordination of conducts in our biological lineage that was possible only in this emotional context.

Tomasello et al.³⁶ have proposed that the critical event for the differentiation between human and primate cognition is an exclusively human *motivation* to share intentionality with other human individuals. As a consequence of this, the human species developed complex forms of collaboration that resulted in the cultural organizations of modern societies.

The use of the educational journey in competence-based curricula

Although the educational journey can be widely used in different educational initiatives, its utilization in competence-based curricula potentializes the construction of professional identity, as situations originated in the interaction with others can produce important emotional impacts.

The professional situations to be faced in the daily routine of the workplace require both cognitive/psychomotor capacities and attitudinal capacities. Unlike the previous beliefs of our culture, logical thought – reasoning –, which emerges from the neocortex, the upper and most recent part of the brain, has not evolved with the function of prevailing over emotions, which emerge in the brain's oldest parts, the limbic system¹⁹. On the contrary, neuroscience studies have shown that rational operations emerge integrated and are inseparable from emotional operations¹⁷⁻²¹.

Thus, Maturana³⁷ defines emotions as body predispositions that ground action domains. When emotions change, operations are altered, as well as the way of thinking and even the conceptions of reality. This is not about using rationality so that there is a clearer and closer perception of the intended objectivity, that is, the “real” apprehension of the object or any situation that is external to the observer.

According to this author's conception, what used to be distinguished as the use of reason, in opposition to passional noises, is nothing more than opening oneself to

emotional changes, to the emergence of new emotions capable of sustaining other patterns of reasoning. Rationality operated over anger becomes different when it is processed in the domain of serenity. Rational operations constructed from jealousy or envy emerge in a substantially different way when they happen, for example, in the domain of trust³⁷.

Finally, the construction of an ethical and professional identity is favored by the reflections produced by the journey in dialog with the desired competence profile. Sharing feelings produced by art opens a space that enables the distinction of emotions that intertwine in the constitution of what Maturana³⁸ has called culture, a closed network of conversations.

The capacity to distinguish emotions in the conversational process can contribute to the understanding of the culture that emerges there and helps participants to find their dialogs – language refinements that allow them to understand the emotional aspects that are recurrently preserved in the group’s culture. Understanding the emotions and rationalities that compose the culture in which we are immersed, as well as the domains that sustain our activities in the workplace, can uncover new practices, considering what society expects from a competent professional.

Final remarks

The integration of art into professional education is a strategy that aims to take the emotional dimension to technical–scientific and educational environments. This strategy operates especially on the premise of the inseparability between reason and emotion.

When we deepen the understanding of emotions as body predispositions that ground the action domains of the most refined rational activities, we see the emergence of a space that favors competence development in professional education and qualification. Although we are immersed in a social context of recurrent expressions of confrontation and exclusion, the dialogic activities enabled by the

pedagogical approach proposed here create conversational environments that are capable of reviving empathic behaviors.

Believing that our collaborative biology preserves our integration, even in the midst of the expression of feelings reinforced by a competitive and exclusionary culture, enables the utilization of educational journeys as an educational action in disciplines or specific interdisciplinary curricular activities. However, their use has a higher potential when they are employed throughout an educational program or initiative, in order to reaffirm the inseparability between reason and emotion.

Thus, we dare to talk about different emotions and construct conditions so that ethical and empathic emotional expressions can be revived, but not only in the reflective moments of the contact with artistic expressions. Our aim is that they are preserved in the dynamics of other educational actions; especially, our purpose is that they are disseminated in workplaces.

Collaborators

All the authors participated actively in all the discussions related to the article, as well as in the review and approval of the article's final version.

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