

International Journal of Human Sciences Research

AFTER THE STORM: MULTIMODALITY AND EMOTIONAL EDUCATION

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Abstract: This article shares the first stage of the training initiative designed to accompany teachers from the State of Morelos in reflecting on the effects of emotions, both personally and in learning processes, through a multimodal work proposal that, in addition to allowing face-to-face academic activities to be recovered, prepare teachers to face the emotional effects manifested by their students, influencing the development of skills for their management. The main idea arises as a result of a diagnosis of needs carried out between the years of 2020 and 2022, where members of various Latin American higher education institutions expressed their main concerns related not only to the use of technologies, but also with the impacts experienced in the personal sphere. This paper presents the contents and findings after the pilot test.

Keywords: Education, Management, Emotions, Multimodality.

INTRODUCTION

In the field of educational research, a fundamental aspect is to recognize the stages and needs that arise when addressing an emerging phenomenon, the imprint of which makes it difficult to have enough information to carry out the analysis of the events in a curated way, but requires defining in a timely manner, even forced, ways of action to contribute proactively to the academic community. A clear example of the above has been the case of the emergence of the COVID-19 health emergency and its multiple effects on educational communities around the world. Almost simultaneously, the pandemic made it necessary to identify a frame of reference to obtain reliable information and carry out initiatives for the continuation of the courses in the multiple educational institutions.

For the second semester of 2022, and facing the imminent return to school, the material, cognitive and emotional effects are visible,

and more than ever it is important to have the wisdom to recover learning and glimpse the future, anticipating possible contingencies. Even the use of masks, hand washing, gel and social distancing are in force, and emotionally this whole situation continues to be stressful. In this regard, the World Health Organization (WHO) refers to the psychological impact of confinement in societies must be addressed with “imaginative measures”, and this proposal precisely accounts for this (Deutsche Welle, 2020). In various media of communication around the world.

This work represents a collective effort to know the effects that sanitary measures have had, and still have, on the mood of teachers and students, with the intention of reinforcing initiatives to develop and reactivate work, taking into account as a fundamental point people and their needs. In addition to the follow-up through focus groups and interviews, the design of a course-workshop carried out as a pilot group is shared, where tools and guidance have been provided to teachers, considering the emerging emotional needs that, even when they may be similar between various actors, vary depending on their family situation, state of health, age group, job responsibilities, among other aspects.

MATERIAL AND METHOD

Meeting the challengeIn order for teachers to identify and accompany their students in strengthening cognitive, physiological and subjective capacities linked to emotions, it has been essential to understand concepts in different areas of knowledge in order to inquire about the implications of emotions in people, in the learning and even about the means to generate links. Thus, the most significant concepts on the use of technologies are enunciated in a summarized way, emerging as a major theme the aspect of emotions, linked

to multimodal education.

The first challenge has been to promote the notion that emotions are not good or bad, but rather reactions of the body that trigger the “chemistry” of individuals. In the literature, there are various theories and authors that address the issue, and try to identify and classify the human emotional experience (Eckman, Paul and Oster, Harrieh, 1972; Plutchik, Robert, 1980; Lyons, William, 2013, among others) and They agree that emotions are usually associated with triggering stimuli, that is, situations that produce anxiety, fear, or a danger to survival, as was experienced in the pandemic. According to Hans Kluge (2021), WHO regional director for Europe, isolation, as well as physical distancing, the closure of schools and workplaces, represented challenges of great effect.

Another essential element was to underline that there are media resources available for interaction with students and teachers called “emerging technologies” that George Veletsianos (2010) defines as tools, concepts, innovations and advances used in various educational contexts at the service of different purposes related to education, which are constantly evolving as alternatives for the transmission and dissemination of knowledge, rather than as immovable resources. In fact, the evident dynamics of educational institutions has led to the search for new training modalities such as distance, online, virtual, free and/or mixed education, in order to address planetary development agendas, such as UNESCO’s Sustainable Development Goals (United Nations, 2015), contributing to the reinforcement of skills that allow graduates to function with an understanding of the implications and possibilities of their training in increasingly challenging scenarios or, as Calderón refers, in a multimodal education system as “a support for channels and platforms, virtual or real,

through which educational multimodality will be developed” where “models and approaches and comparable learning styles converge for the construction of school trajectories of an educational institution” (Calderon, 2012, p. 102).

Regarding emotions, Goleman (2003) mentions that all of them are impulses for action, instantaneous plans to face life that evolution requires leading to act. Thus, emotional well-being, as referred to by the Spanish Ministry of Health (MSE, 2020) conceives emotions as temporary reactions that end when the stimulus does, being intense at first and diminishing as the situation recedes in time. However, it clarifies that there are people who tend to cause very frequent emotional states, of great intensity and duration and, consciously or not, a state of mind that is not necessarily positive prevails, despite the fact that the initial situation disappears, having a high cost to health due to depletion of resources, Therefore, it is crucial to identify the cases of the students early, to avoid further suffering. Very briefly, the Emotions are reactions that human beings experience: joy, sadness, fear, anger... widely known in practice, but their approach, at least from pedagogical practice, seems to be in the background. For example, anxiety or nervousness, common at exam time, when you have a bad management, can lead to a blockage or even illness.

The MSE (2020) shares some easily identifiable situations and reactions that commonly produce emotional responses in humans:

- Fear of losing one’s life or threat of a negative outcome (reaction: fight, flight, standby, or freeze).
- Confrontation of interests between peers (reaction: anger or anger).
- Loss of a loved one (reaction: sadness and empathy with the people they

support).

- Celebration of a success or falling in love (we react: exaltation).
- Effort before a challenge (reaction: satisfaction and joy).
- Before people who need help (reaction: quickly and altruistically, even at the risk of their own safety).

All the reactions referred to above are identified as coping actions. The referred actions act at three different levels:



Figure 1. Levels of Coping Actions (own elaboration, 2022).

A. cognitive level. Ability to understand, judge, memorize and reason. This way of reacting, this “program”, resides in the amygdala, in the deepest part of the brain. In this “emotional” organ there is no conscience or decision-making capacity and events are recorded in it.

B. physiological level. A series of responses from different systems are activated: muscle tension, blood pressure, respiratory rate, peripheral temperature, dry mouth, etc. that will prepare the individual differently depending on the response.

C. subjective level. Totally depending on the individual, a series of intense, unpleasant and uncontrolled physical sensations are experienced which, together with cognitive changes and some thoughts about danger and its consequences, cause a unique and unforgettable experience.

Emotional reactions can occur before situations that have occurred or anticipating them when they are imagined, and this was

a constant element that was detected during the pandemic due to the possibility of being infected, it being important to be able to differentiate emotions from feelings, moods and even affectivity. Briefly refers to (MSE, 2020):

1. **The feelings.** They are more lasting than emotions, which are temporary and more linked to reflection. They are not usually related to intense physical sensations, they are milder and do not immediately trigger behaviors

2. **The state of mind.** Also called “emotional experience” and like feelings, it is usually more intense and longer than emotion.

3. **affectivity** It encompasses all of the above, including emotions, and is the most generic term of all.

And to complete the framework, one must distinguish between an emotional state and a characteristic inherent to an individual. It is not the same to be nervous or anxious than to be. The first case is a temporary situation and the second refers to a personality trait that accompanies the individual in different situations and throughout his life.

In the most recent decades, a movement has emerged, represented by authors such as Martin Seligman (2003) whose psychological current criticizes that, for years, the central point has been located more on the negative aspects of behavior than on the positive ones. Seligman refers that fear or anxiety has been studied much more than happiness or satisfaction, despite the fact that all types of emotions are important for the adaptation of people in their day to day. The main point of positive psychology is to insist on the study of protective factors for health and not only those of risk, that is, those emotions and forms of behavior that allow us to better deal with negative situations.

Finally, the concept of emotional

intelligence that gained great popularity as a result of the book “Emotional Intelligence” published in 1995 by the popular journalist Daniel Goleman has been integrated into the study. Goleman based himself on various research articles published in the 1990s by a series of authors who studied the subject using a scientific methodology. This concept was born in 1990 (Salovey & Mayer, 1990) and, since then, there have been numerous theoretical models and empirical studies that have dealt with emotional intelligence, considering it as an important mechanism to get ahead in the face of life’s adversities. representing a very useful source of information about the real context of life, its consequences and its importance in the way of facing events.

An important note is that, for the study presented here, intelligence is not seen as the assessment of cognitive ability, but rather a set of aptitudes and abilities to deal with various life situations. It is clear that emotions and cognitive processes, although independent, are necessary for adaptation to the environment, but the combination of both contributes not only to carrying out the tasks of learning, but also to carrying them out with the least degree of stress, increasing the performance, health and well-being. According to various studies, it has been concluded that:

- Students and workers with greater academic or professional success have higher levels of socio-emotional competencies.
- Certain negative emotional states, such as depression, are associated with low academic and professional performance.
- The application of programs for the development of these competences increase the learning process, favor social integration, prevent work absenteeism, school dropout, violence or harassment.
- Emotional intelligence helps to

compensate for lower cognitive intelligence.

- Emotional intelligence training not only helps to better manage emotions and improve negotiation skills, but also helps the other negotiator feel better about the result regardless of it.

And therefore, these studies define emotional intelligence as “the ability to accurately perceive, appraise, and express emotions; the ability to access and generate feelings that facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions and promote emotional and intellectual growth” (Mayer & Salovey, 2007) and this is explained through the four branches of the model described by Mayer & Salovey:

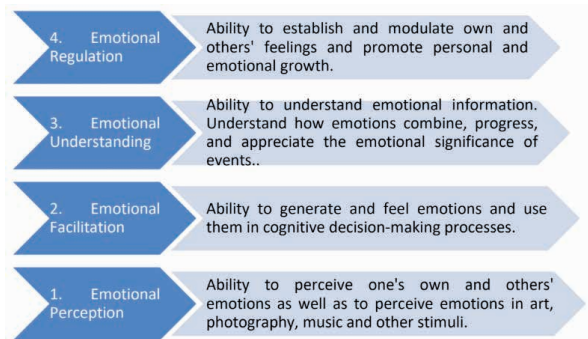


Figure 2. Emotional Regulation based on Mayer and Salovey, 2002 (own elaboration, 2022).

The last branch of the model refers to the most complex part of the process of all, and refers to the ability to manage one’s own reactions and emotions in certain situations, whether positive or negative. In this phase, you learn to use the information that is collected according to the way to react without going to extremes, that is, without repressing the emotion or exaggerating it.

The development of the investigation arises in two moments: a) Selection and design of contents; and b) Pilot test, leaving for a later moment the interviews and focus groups that

will be carried out in the second semester of 2022 in order to assess whether, in the immediate future, the idea of proposing a way of working is accepted. multimodal or, in their case, mediated education was more forced by the situation and they have the desire to return to “normality” leaving aside the online and/or virtual technological options.

Due to the pandemic, the world has witnessed various changes in the way the education sector works and, therefore, methodological approaches have required creativity and imagination to be able to address complex problems as clearly as possible. This work is part of a series of studies that have been carried out over three years. In a very summarized way these have been the studies (Juárez-Salomo, 2022):

- a) At the beginning of 2020, diagnosis with the participation of teachers from eight Latin American countries and design of a comprehensive pedagogical strengthening program, through online and virtual environments (pinwheel model) that is still in force through platforms and applications (Juárez-Salomo, 2020).
- b) Year 2021, students design initiatives to acquire and strengthen their global awareness through virtual environments with students from Central and South America under the Collaborative Online International Learning -COIL model.
- c) First semester 2022, inquiry into the opinion of students towards their learning and teacher performance during the pandemic and the emotional and appreciative aspects that gave rise to the teacher training strategy presented here were defined.
- d) the fourth stage What motivates this study is the creation of a space for coexistence and reflection among peers

where, through the exchange of ideas, dynamics and collaborative work, the concept of emotions is deepened and models, alternatives and intelligent management tools are known, applicable both in personal life and in various work contexts.

The fourth stage was designed at the beginning of this year and the first pilot test was carried out with 40 teachers in July. The seminar-workshop lasted 20 hours and involved both conceptual aspects and activities to promote personal well-being, divided into four blocks:



Figure 3. Emotional Management and Personal Well-being Seminar-Workshop, 2022 (own elaboration, 2022).

RESULTS

The contents of each block were raised as follows:

<p>Block 1. General Concepts And After Coronateaching, What's Next? The human skills to move forward. What are emotions? Emotions vs feelings. Emotions and positive psychology. Change Management and Resilience.</p>	<p>Block 2. Identification of Emotions Colors and Emotions The concept of emotional education The objectives of emotional education Emotional Models: The Six Primary Emotions Situations and duration of emotions Emotions and Physiological Activation positive and negative emotions</p>
<p>Block 3. Understanding of Emotions Emotional intelligence (the 4 branches) Emotional Perception Understanding emotions: assimilation or emotional facilitation Regulation of Emotions. Stress and insomnia: diseases of our time. What is not controlled: Anxiety and sadness. Covert anger: normal and pathological</p>	<p>Block 4: Regulation of Emotions Psychological techniques for managing emotions. Emotional well-being and Health. Ludotherapy. Necessary social skills. The hormones. Emotions and Stress Emotional Well-being and Health The memory of the group Autonomy and Innovation in Virtual Learning Environments</p>

Table 1. Content details by block (own elaboration, 2022).

After the seminar-workshop was given to 20 teachers, an evaluation meeting was held and questionnaires were applied that allowed to verify greater knowledge, sensitivity and empathy on the subject of emotions and, during the course, some digital instruments were applied for self-reporting. theme exploration. Finally, guides and resources were made available to maintain contact and delve into emotions, with a view to working with students, and a follow-up through focus groups and interviews.

DISCUSSION

In this fourth stage of research, a pilot test was carried out, detailed in the previous section, however the real challenge is in the semester that is about to start (September 2022), since the equivalent of the seminar-workshop will be developed simultaneously

with students and teachers of " Universidad Autónoma do Estado de Morelos" in modalities to be defined depending on the availability of schedules. The idea is to start with a group of teachers and work with at least two groups to be able to carry out the evaluation and the necessary adjustments, first for the face-to-face modality and continue with the assembly of a virtual alternative. The idea of carrying out the virtual edition is to take advantage of digital resources for the emotional regulation process, contributing to the tutorial program and, even more important, Influence the use of technologies with sense. More than a return, the bet is for a reinvention that allows the historical phenomenon experienced due to the pandemic to remain as an example of what the educational actors did to continue, as well as the learning of what must be foreseen in the face of phenomena of planetary magnitudes. to be doubly aware of preventive actions.

Faced with situations such as the one experienced in recent years, it is important to remember thatThe learning process, in a positive and innovative sense, requires providing students with opportunities to learn, learn and experience, whether in face-to-face, virtual or hybrid environments, to stimulate the intellects of young minds, eager to exist meaningfully in the planet. It is vital that school learning experiences go beyond traditional forms, styles and schedules, allowing students more authentic experiences and real-life application of knowledge (OECD, 2020). The growing interconnection between users fosters possibilities of multimodality in various areas of life, and education is no exception.

Clearly the COVID 19 pandemic represents and will continue to be an important part of life for parents, students and teachers in several aspects, as a great challenge, having to follow new routines and the partial or total incorporation of online learning models. For

this reason, this research intends to allow what has been experienced to be part of a process of unlearning, or rather, of reinvention to understand that a traditional program as it was known is not the same as a mixed or virtual one as those that will surely prevail.

CONCLUSIONS

During the COVID 19 pandemic, the use of technology was practically the only way to study. At “Universidade Autônoma do Estado de Morelos”, even before the health emergency, there were courses offered based on e-learning. Considering all the emerging situations due to the pandemic, the spirit of this article has been to share, three years later, the effects detected and courses of action to emotionally care for teachers and students, proposing “after the storm” alternatives for multimodal environments.

The set of information and communication resources, processes and tools applied to the structure and activities of the educational system in its different spheres and levels must be carefully reviewed and analyzed in order to cautiously respond to new challenges and needs in the educational field. especially considering the implications for the development of a digital culture in the classroom.

When planetary challenges such as the COVID-19 pandemic find a solution in the use of information technologies, that is, in the use of computers and more telecommunications equipment for the storage, transmission and manipulation of data, users must reflect on the implications for educational purposes. It is not about gadgets, but about means to achieve higher ends. It is clear, based on recent experience, students can access much more information through the implementation of new technologies that, by the way, also open up new spaces for recreation and the creation of constantly updating environments.

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