

AFFECTIVITY AND COMMUNICATION IN VIRTUAL LEARNING ENVIRONMENTS

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Abstract: If affectivity is important in classroom's learning environments, then it becomes more complex to reach in distance learning environment, where there are no other sensitive elements.

The type of communication established between all members of the community is paramount to create bonds of affection.

The expression of affectivity in learning environments is about communication, which in a virtual environment, is essentially made by using the writing.

The way of communication becomes to be expressed in written form, where may arise some indicators which will turn into a symbolic register. This logic operation involves changes in social relations established between the elements of these communities. They write texts which are interconnected with certain symbols.

There is a connection between affectivity and cognition. The rational brain and the emotional brain work as a whole, in a present context and also in a virtual context.

This paper aims to address the affective dimension of learning in virtual environments, whether in Forums, whether the characteristics of the e-teacher, valued by learners. Our results, in both parts of our study, highlights the presence of the affective component and its regulator role in these learning contexts.

Keywords: Cognition, affectivity, communication, virtual learning environments.

AFFECTIVITY, COMMUNICATION AND LEARNING

One of the learning's aims is to allow students to adapt themselves. So, in an adaption task, the student should compare his situation to his expectations and find a way to enable it to build a bridge between the current and the future gap. Achieving this goal requires the motivation to carry out the needed tasks.

Here we find two factors. On one hand, aspects related with tasks' recognition and the necessary means to proceed with the processing of information, on the other hand, the aspects which lead the student to begin the process. It is not enough that the student only involves himself cognitively in the task. It is also necessary an affective involvement.

The developed works by Damásio (2000) and Goleman (1997) came to demonstrate the big importance that emotions have in life.

The importance of affection in life, has been recognized since a long time ago. This is seen as vital and stimulating to thoughts and behaviors. The affectivity may be coated in various ways, including the emotions and feelings.

However, in general, each emotion represents a different predisposition to action, guiding us “when we have to deal with situations and task too important to leave only as a charge of intellect” (Goleman, 1997, p.26)

Brien (1994) defines emotion as a result of a process of double nature, physiological and psychological, which is triggered from the perception that individuals have of the difference between the present situation and the situation that they aspire to have. This leads to activation of the physiological and cognitive evaluation of the situation. From the moment that is formed in a particular sensory representation, whether or not it is part of conscious thought, we have not great control over the mechanism inducing the emotion. If the psychological and physiological contexts are adequate, then it will be an emotion (Damásio, 2000).

Goleman (1997) explains that we have 2 minds: “one thinks – the rational mind”, with conscious understanding, thoughtful and reflective and “another one feels – the emotional mind” (p.30) more impulsive and sometimes not logical. These two modes of functioning are, “semi-independent, reflecting each one of them,...,the operation of different circuits, but linked, inside the brain” (p. 31).

The logic of the emotional mind is associative, because it evokes the memory of a reality as reality itself. Following this logic things have not to be defined by their objective identity. The most important is how each one perceives them.

Events are seen from a *personal* perspective, focusing on the person. This feature, on one hand, can lead to suppress or ignore the facts or memories, unlike to their beliefs; on the other hand, it can focus on those facts that confirm it. So is self-confirmatory. Here we find portrayed the phenomenon known as *self-fulfilling prophecies*.

The learner's affective structures develop in parallel with the intellectual structures. Both are acquired, are modified or constructed during the course of experiences, established interactions in a favorable environment and accompanied by appropriate incentives.

Also Damásio (1995) aware us for the articulation of the cognitive and the affective. It is this that encourages or makes it possible to learn psychomotor or cognitive content, leading to his absence to compromise the cognitive and psychomotor development of the learner. Emotions should be considered as a requirement to learn.

We can then say “cognition, emotion and response” are a cycle of feedback, which are the basis to explain human behavior. Cognition awakes an emotion and, according to the felt emotion, it will generate a response. Emotions impose responses and quality processes of social interaction.

The affectivity is built on interpersonal relationships because in all human relationships, being them present or virtual, we are influenced and influencing thoughts, feelings, emotions and actions.

Virtual learning environment, by their particularity, show a pattern of communication, which affects, among other things, relationships between individuals.

The way of communication is no longer based on oral speech and it begins to be expressed in writing form. This logic operation involves changes in social relations established between the different elements which constitute these communities. In other words, inter-subjectivity is to be mediated in an online context.

Affectivity and Inter-Relationship Between Teacher and Students

Throughout the pedagogical relationship there is a participation of a teacher and students who interact and relate not only cognitively but also emotionally. Affectivity translates not only as a way of direct interaction, but also as the way of presenting the contents.

Knowledge building is made through experiences, both cognitive and affective between the involved parts.

The virtual learning environments are privileged and based on the construction of an autonomous learner and self-motivated. These assumptions imply that the teacher must be prepared to face the challenge of establishing an ongoing and effective relationship with the student, being prepared to handle the situation of teaching and distance learning and how to compensate the fact of not being face-to-face - to know, to support, to encourage and to help the student. The teacher, beyond imparting knowledge should guide the process of student learning in order to develop their skills, including learning to learn, self-learning and autonomy. It is expected to be a *moderator* in interpersonal and intrapersonal relations, making self and peer evaluation of contents and performances. It is also expected to support and encourage the students, guiding and regulating their emotions, affections and attitudes.

We know that these issues weigh dramatically in distance learning, because of this type of education system, the solo effort of learners may generate obstacles, either of cognitive or affective order, which will be reflected in their learning (Goulão, 2011).

Sometimes, the recourse to teacher is made by a psychological, emotional and reinforcement need, for their continuation on the learning system.

According to Aretio (2002) “effectiveness and efficiency of educational institutions depend mostly on education, capacities and attitudes of their professors” (p.116).

Fóruns and Affectivity

In virtual learning environment is also possible to have a social-affective communication. In these learning systems individuals' presence is “known” for their participation in proposed activities. There can be used several interfaces, but they are almost just in written language. The Forum comes up like an interface where students and teachers can express, not only their cognitive production, but their affectivity as well. It works according to a dialogic process allowing the intervenient to, about a certain theme, change points of views, agree and disagree between them. It is this process that helps to shape and establish links between different participants, considering that the availability of this exchange of ideas is necessary for everyone to learn to hear each other, to respect different positions, which makes possible to find new meanings. According to Oliveira (2009) “In this process the affectivity is stimulated, making the participation feels like part of the group and motived to stay in the process” (p.8)

However, it is not enough to recognize that there is affectivity. It is necessary that the other understands that affectivity. According to Longhin et al (2009), theoretical studies about affectivity concepts and moods, allow interaction, among other things, support analysis and understanding of learners' observable in interaction. According to Scherer (2005), moods can be grouped in affectivity families. Longhi et al (2009), supported in several theoretical studies sought to represent the states of mind as shown in Figure 1.

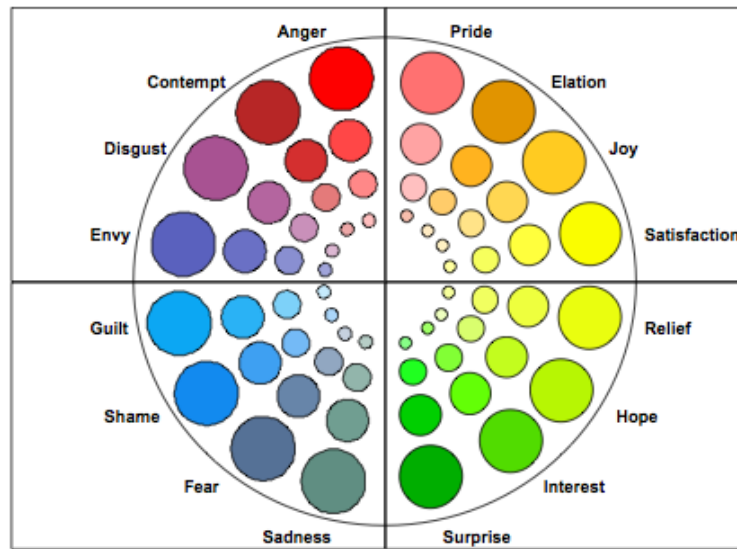


Figure 1 *Space of Mood's Representation* (Longhi et al, 2009)

According to these authors, the categorization of a text can be made from the count of positive and negative terms that compose it.

Garrison et al (2001) regarding the online learning introduces the concept of *Community of Inquiry*. According to these authors, this community is composed by a group that communicates and interacts from the requests and responses to questions / opinions posted by other members on a dialogical perspective. These communities are made and based through the articulation of three basic elements: cognitive presence, teaching presence and social presence.

As it was previously said, Forums are one of the main interface in this learning system and consequently the written language has an important role. So, the study of social presence should be made with resource to a textual analysis to the messages. The language used on Forums presents linguistic features has characteristics of its own language. Bastos et al (2010) present a set of textual clues indicating *affection*. Among these is the emphatic use of capitalization, repeated punctuation, emoticons, teasing, jokes, irony, sarcasm, details of extracurricular life, vulnerability and strength (intensity). They found that the expression of Affectivity in the Forums is "detected, mostly in response to expressions of thanks or explanation sent written in a conventional signaling more polite" (*op.cit.* pp-6-7).

Metodology

This point is divided in two parts. The first one is about the study of the characteristics of e-teacher and the second one is about a set of work Forums' analysis.

Part 1 – Teacher In Elearning

A. Sample

Our study's sample was a total of 80 distance learning students that made well the questionnaire. About the sample's gender, 33% were male and 67% female. Age minimum 26 years, maximum 60 years, mean 38 years. All of them are working students. The average frequency of this type of education is 2 years and the sample was from different degrees.

B. Instruments

The collection of the students' data was done through a questionnaire with two parts. Part one was demographic. The second part was about the teacher's role in e-Learning. They must describe it in three key words.

C. Results

After analyzing the answers' content, they point out to 3 dimensions. – Table 1

Table 1: Teacher's Dimensions in Virtual Environment

E-teacher		
Facilitator Skills	Management Skills	Technical Skills
63.1%	33.3%	3.6%

Facilitator Skills imply personal, social and pedagogic aspects. It implies the ability to motivate, venturing into new situations, to guide, to strengthen, to communicate with students and to encourage their participation.

In turn, management skills are associated with capabilities to manage training activity

- Tasks' definition (type, length, quantity...)
- Contents' definition
- Answers and interaction definition

Finally, technical skills, such as the name suggests, are linked to the skills of navigation in virtual environments. These dimensions consist of categories as described in Table 2.

Table 2: Teacher's categories in virtual environment

E-teacher (categories)	Facilitator Skills	Motivator	13.6%
		Online Personality	22.9%
		Feedback	12.1%
		Support/Guide	25.7%
		Pedagocig aspects	25.7%
	Management Skills	Time Management	70.3%
		Organization	29.7%
	Technical skills		3.6%

As we can see by the obtained results, these students value skills associated with emotional aspects, reinforcing the idea previously conveyed on the skills inherent in teaching and learning environments which, in turn, are closely linked to emotions.

Part 2 – Forums’ Analyze

Sample

To study this parameter it was used as sample 3 different types of forums that refer to different contexts. The first forum type is about supporting the teaching activities development between a group of professors. The second group analyzed is part of the Doubts and General Questions Forum of a 2nd cycle of Bologna seminar. Lastly, the third working group was selected from a Working Team Forum from a 2nd cycle of Bologna seminar.

Instrument

These 3 types of forums were analyzed by their written expressions, kind of punctuation and their usage, or not, and symbols that refer to affection expressions.

Results

We are going to present, as an example, some messages that were placed on three different Forums. With this, we intend to illustrate the importance of both forums to build a community and as well as its role in learning. Table 3 shows some examples of messages placed in a space designed to support and sharing of documents and situations between teachers and guardians of a 1st cycle course of Bologna – *Meeting Point*.

Table 3 Example of messages in a Teacher’s Team forum

	Intervenient 1	Intervenient 2	Intervenient 3
Situation 1	Good night Prof. and colleagues (...) and, while is still day 8, I wish you a very good special day – Women’s Day! ☺	Good evening, (...) and remaining colleagues Thank you so much for day 8. ☺	Hello (...), Thank you very much to remind me that is day 8. Have a nice week! ☺
Situation 2	Hello professor and colleagues, I can’t resist bringing to this space a message of a curious situation that a class’ student ... put on Student’s Forums... (I don’t really know, but sometimes I feel a little uncomfortable ... or am I overreacting?!) For the three of you have a nice week and let the Sun keep on shining! (...) Thanks for sharing ☺	Hi (...)! In some situations it’s natural to feel messed and restless about some students’ intervention. Summarizing, don’t let yourself feel intimidated by the student neither demonstrate that his message left you uncomfortable. I would showed I’m happy for his interest in the author and in her written revealing the will to make a detailed study. Well, I hope I’ve been helpful in something, or at least at thinking about these situations. Hugs and have a good Sunday!	Hi (...) and (...), I agree with (...) If you feel more comfortable, before launching the grades, I can review your work. Hugs and enjoy this sunny day!

In table 3, we can verify an affectivity expression. In addition to the theme of the message that triggers the situation, the form of transmit and the associated emoticons help to create an emotional climate

conducive to the whole team. In table 4, initiated by a need for sharing of an element, where the punctuation marks, as well as the use of different emoticons that seek to convey the way they feel each statement or each question, the group triggers a sharing of emotions and a sense of helping each others.

This second example comes up from *Doubts & General Questions Forum* of a seminar from the 2nd cycle of Bologna.

Table 4 Example of messages Doubts & General Questions Forum

	Intervenient 1	Intervenient 2	Intervenient 3
Situation 1	Hello I2! If for you it's necessary and important what your asking, if the Professor accepts your request, here we are to extend and wait for you.	Hi I1 I appreciate your solidarity.	Dear I2 (...) I hope this help you get through, at least less partially, your difficulties. See you soon and keep on the good job!
Situation 2	Dear Professor ☺ Thanks for "listening" and answer ☺		Dear I1 As you say and it is well said, we are all in the same boat. So, I believe your success is ours too. We have to "listen" to help get through difficulties and, if it's possible, get better in some aspects. See you soon

Although it can be verified a more formal speech where, as Bastos et al (op. cit) said the affectivity expressions are found in the thanks to situations expressions, questions are made. Also here we find again, not that much, the *emoticons* and some punctuation. The vulnerability is one of the features of the first situation.

Finally, we are going to present Forum interventions about a group work.

Table 5 Example of messages of a Team’s Activity Forum

	Intervenient 1	Intervenient 2	Intervenient 3
Situation 1	Hi I3, I2 and I4 Here we go in another journey... If we try to divide the texts between us to manage the effort and get a more positive result? See you soon	Hi “buddies”, I think it’s a good idea I1. Moreover, that is what we have done in the other group where we were, do you remember? We should organize ourselves before Easter holidays.	Hello..., Together for one more activity ☺ I apologize for just giving news now, but our works have been intense.
Situation 2	Good night I agree with everything. I can have with the 4th text. If you agree I can have the first 4. Let’s keep on...	Hi For me it’s right ☺ I already started, although timidly, because I have a lot of work in school. I hope this little following break helps me A happy Easter to all and have a good rest/work...	Hi fellows, Please pay attention to the text codes. The better is to use the codes as they appear on the platform and not like texts 1, 2, 3... because they don’t exist and it would be confusing.

In this type of Forum, it is all about using emoticons as a way of expressing affectivity. Also we can find some aspects linked with personal life details, as well as Strength (intensity), especially in the first situation.

Regardless the perspective as a basis for studying the affective component its existence is clear, its importance and its impact on building community and individual learning.

Final Consideration

The present paper searched to approach affectivity in virtual environment. The literature review done points to the role of emotions and affectivity in the lives of individuals, in general, and particularly in the situation of learning and communication. As we saw, virtual environment of learning do not escape to this influence. However, since this means are so specific, there were some reviews in some particular aspects. It was the case of the analysis of teacher’s role. As the literature pointed out, students themselves consider important skills that are closer to the emotional aspects and

reinforce them. This leads us to highlight the importance of these actors in a virtual environment and the need for training them in order to strengthen or acquire skills to enable it to adjust its scientific content to a specific pedagogy and didactics of these systems, particularly with regard to socio-emotional communication.

Interactivity, which takes form in the forums of dialogue, allows participation - involvement of students, leading to a two-way communication between them and the teacher. The analysis of the different examples of intervention in the various forums turns possible to find evidence of affection expressed by different stakeholders. These manifestations are effectuated in certain expressions of agreement, to encourage recovery and also through certain symbols. These situations promote the reception of the participants and encourage them to join the group.

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