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Paper

This study presents the analysis of the emotions appearing in assessment-motivated collaborative online learning. The connection between emotions and learning has been studied in the last decades mostly related to assessment situations. These previous works, however, do not study the online context. In contrast, pioneer studies of online-emotions do not focus on assessment; actually, generally speaking they rarely consider learning situations at all. This study addresses both shortcomings using the concept of *distributed emotion*. A case study is presented for which 34 teacher-students and their instructor spontaneously established class norms of motivated collaborative online learning which took place in an online forum within the LMS Moodle. The interaction of participants in the virtual space is analyzed from a mixed approach. Four different techniques of analysis were applied: analysis of individual participation, chronological structural analysis, content analysis of forum interaction, and discursive analysis of the devices of emotional communication that the participants develop in the joint activity. Results of the study point to different elements that might foster the emotional processes shared in the virtual space. The emergence of ‘emotional roles’ in the group -both positive and negative- helps the participants to move forward in the learning process. This study is a first brick stone towards the understanding of distributed emotional processes in the context of virtual learning, particularly of those emotions related to the assessment of learning. This work, hence, contributes to the better global understanding of online learning situations.

Emotion regulation in online assessment-motivated collaborative learning

Extended summary: type text in the box below

Background

This study presents the analysis of the emotions appearing in assessment-motivated collaborative online learning. The connection between emotions and learning has been studied in the last decades mostly related to assessment situations (Pekrun, 2005; Gläser-Zikuda, Fuss, Laukenmann, Metz & Randler, 2005). These previous works, however, do not study the online context. In contrast, pioneer studies of emotions in the online sphere do not focus on assessment (see, for instance, Derks, Fischer & Bos, 2008; O’Regan, 2003; Wosnitza & Volet, 2005). As a matter of fact, the previous research rarely considered learning situations at all. A recent exception of this trend would be the work of Järvenojä and Järvelä (2005); however, these authors do not analyse assessment situations. In addition, up to date, the study of emotion traditionally has been addressed from an individual perspective (Zembylas & Vrasidas, 2004). In the case of online learning, the trend is not as clear (Provine, Spencer, & Mandell, 2007; Rice & Love, 1987), however, much remains to be explored. This study addresses both shortcomings using the concept of *distributed emotion* (Glazer, 2008). Emotion is assumed as both an individual *and* social phenomenon, from a socio-cultural perspective. In particular, I study the emotions of students anticipating the challenges their first university exam.

Aims

The study intends to respond to the following questions:

- Which emotions are shared online in the context of collaborative assessment-motivated study?
- How do the participants construct and regulate their emotions interactionally?
- Are there emergent roles to be identified?

Method

An interpretive case study was undertaken (Friesen 2009). Thirty-four freshmen teacher-students and their instructor spontaneously established class norms of motivated collaborative online learning which took place in an online forum within the LMS Moodle, so that the students gather together in the online forum in order to formulate questions and doubts, and also to respond each other, concerning the learning contents of the exam ahead, which is their very first examination at university. The interaction of participants in the virtual space was analyzed with a mixed method approach. Four different techniques of analysis were applied: analysis of individual participation (Hrastinski, 2008), chronological structural analysis (Mauri, Remesal, & Clarà, 2011), content analysis of forum interaction, and discursive analysis of the devices of emotional communication that the participants develop in the joint activity (Delfino & Manca, 2007). The interational data were gathered during nine consecutive days, including both a pre-examination and a post-examination phase.

Findings

Results of the study reveal the emergence of ‘emotional roles’ in the group -both positive and negative- that help the participants move forward in the learning process and cope with the tension and fear. Five different levels of participation are identified, which are related in turn with different levels of emotional engagement in the joint activity.

- Level 1: punctual writing only in the post-examination phase, showing only reactive emotions (14.2%)
- Level 2: punctual writing or up to the expected mean value of participation in the pre-examination phase, showing only emotions of anticipation (42.8%)
- Level 3: writing both pre- and post-examination but lower than mean contribution (14.3%)
- Level 4: high writing contribution in pre-examination period but lower than mean post-examination (11.4%)
- Level 5: high writing contribution in both phases (17.1%).

The participants at participation level 5 were selected for a deeper analysis.

Emotions manifested by the students are: *anxiety*, *sadness*, and *shame*, on the negative side, and *enthusiasm*, *pride* and *hope*, on the positive side. The emotions were shared in a loop-like process of mutual influence; they develop in wavy propagation (Fig.1)

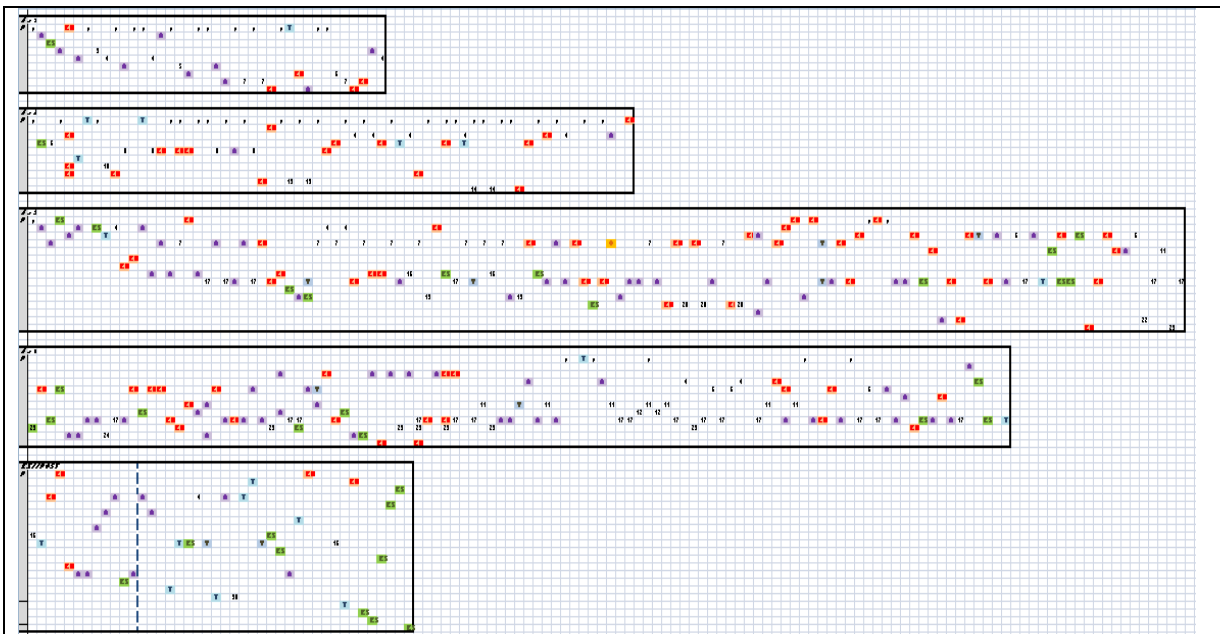


Fig 1. Diagram of the emotional development of the joint activity.

Theoretical and Practical Implications

This study is a first brick stone towards the understanding of distributed emotional processes in the context of virtual learning, particularly of those emotions related to the assessment of learning. This work, hence, contributes to the better global understanding of online learning situations. The results shall help online instructors to promote better e-learning practices.

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