A study of the emotional climate of a science education class for pre-service teachers in Bhutan

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Abstract
Teaching is an emotional activity, yet the role of emotion in teaching has received little attention. This is especially the case with pre-service teachers. In this case study, I examined the emotional climate of 28 (18 male and 10 female) Bachelor of Education pre-service secondary science teachers and their tutor’s science education classroom at the Case College of Education, Royal University of Bhutan. Sociological perspectives of human emotions and Interaction Ritual Theory were used as lenses to provide a detailed analysis of the pre-service teachers’ emotional arousal, tutor-student and student-student interactions, and emotional climate of the classroom. It was a multifaceted study involving video and audio recordings of the teaching episodes supported by interviews, field notes, and cogenerative dialogues.

The findings of this study highlighted that the activities and relationships between the tutor (lecturer) and students (pre-service teachers) matter to student perceptions of emotional climate. For instance, positive emotional climate was identified in activities involving students’ presentations using video clips and models, group activity, coteaching, humorous moments, and interactive whole class discussions. Successful interactions were characterised by mutual focus of attention, shared emotion, and positive emotional energy. The structure of successful class interactions can be replicated by other science educators who wish to produce positive emotional climate in their classes at both high school and college levels. Negative emotional climate was identified when the tutor ignored students’ responses, during formal lectures, when the tutor was uncertain of subject knowledge, interruptions from students, and when the tutor did not show up to the class. Such classes were characterised by the tutor or students in terms of frustration or disappointment.

Cogenerative dialogues helped to ascertain what worked and should be strengthened, and to identify intervention strategies that improved classroom practices. The other innovative feature of this study was the use of a moment-by-moment self-reporting technology called keypads or
clickers to measure student perceptions of the emotional climate of their science class. The emotional climate was positively valenced when the classroom events were characterised by interactions between the tutor and students that were fuelled by humour and collective effervescence. Conversely, the class emotional climate was negatively valenced when the tutor dominated the session and the interactions were univocal.

This study recommends several enabling conditions (e.g., individual engagement, frequency of interaction and informality of interaction, cogenerative dialogue, and presence of resources) to sustain mutual focus of attention and shared emotion during classroom interactions.

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