Geophysical Research Abstracts
Vol. 12, EGU2010-4235, 2010
EGU General Assembly 2010

The joys of mapping: qualitative insights into the student experience of a residential geoscience field course

Alison Stokes

Experiential Learning CETL (Centre for Excellence in Teaching and Learning), University of Plymouth, Plymouth, UK (ajstokes@plymouth.ac.uk)

Using a mixed-format survey instrument, Boyle et al. (2007) identify significant effects in the affective domain resulting from participation in residential fieldwork. These findings are echoed by Stokes & Boyle (2009) in a separate, more detailed, study into the experiences of geoscience students when learning geologic mapping. While providing a quantifiable measure of changes in the students' attitudes and feelings, however, these survey data provide limited information about the experiences that have resulted in these changes, or of the factors likely to have influenced them. In order to gain a deeper insight into the students' affective responses, the quantitative data collected during this study were supplemented with qualitative data from in-situ and group interviews, open (free-text) survey questions, and direct observation of fieldwork activities. This provided a richness and depth of information that could not be achieved from quantitative data alone, and thus afforded a greater understanding of the students' experiences of this particular field activity.

The survey findings showed that positive feelings and attitudes present at the start of the mapping field course became reinforced, but closer scrutiny of the data revealed that over half of the student cohort (57%) embarked on the fieldwork with some degree of worry, concern, or anxiety. The qualitative data enabled the source of these negative feelings to be identified, and provided evidence that these were overcome as a result of participating in the fieldwork. Thematic content analysis of the data resulted in the emergence of ten major themes; these provided a clear indication of factors significant to the student experience, and of specific aspects of the field course likely to generate either positive or negative affective responses. Further, these data highlighted the complexity of the learning process, and demonstrated the extent to which experiences varied between individual students.

The social aspects of this field course emerged as being highly significant to the students' overall experience. The field is a social environment, and active participation in field activities enabled students to engage in social interactions with both their peers, and with 'experts', e.g. academic and technical staff, and postgraduate students. Such interactions can be significant in shaping students' identities as geoscientists. In particular, they provide the opportunity to engage in shared experiences, through which students gain competency in subject specific skills and develop a vocabulary which is specific to the geoscience community. The unique socio-cultural setting in which this field course took place facilitated the continuation of these interactions outside of the field environment, and formed a vital component of the students' learning experience.

The findings from this study broadly echo those from similar research undertaken at the same institution into residential field courses in geography and environmental science. While the locations, aims, and activities associated with these field courses vary, social and cultural aspects have consistently emerged as important and valued aspects of students' experience of undergraduate fieldwork. This appears to be an area of research that is somewhat overlooked, and one which merits further investigation.