Participatory practices: Lessons learnt from two initiatives using digital technologies to build knowledge
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Computer-supported collaborative working is receiving increasing interest (for example, see Stahl, 2006). Much research in the field concentrates on successful projects, but less is concerned with taking a step back and examining both successful and less successful aspects of such projects (Suthers, 2006). This study aims to address this ‘gap’, drawing on two initiatives in which groups of people collaborated, using web tools, to build knowledge.

In the first study, the DAIS project (see Wishart et al, forthcoming), school students were asked to discuss ethical issues in science, using a moderated online discussion board (hosted on the Bioethics Education Project (BEEP) website (www.beep.ac.uk)), both in their school science lessons and after school hours. DAIS worked on the assumption that discussion would help students develop both their argumentation skills and their knowledge of different perspectives concerning ethical issues.

The second study involved members of the STELLAR European Network of Excellence (http://www.stellarnet.eu/), which aims to develop a research agenda for Technology Enhanced Learning (TEL) in Europe. STELLAR subscribes to a ‘Science 2.0’ way of working (derived from the ideas of ‘web 2.0’ (Miller, 2005)) in which knowledge is built by the community and the contributions of all individuals are valued and become aggregated to represent the ‘wisdom of the crowds’ (Surowiecki and Silverman 2007). The initiative discussed in this paper used a wiki to develop STELLAR’s first vision and strategy statement.

There are three key differences between the initiatives. First, in the school context, the students were instructed to contribute to the discussions whereas in the researcher context, the researchers could be seen as more self-directed and self-motivated. Second, the tools used were different; on a discussion board the discussion is built up and contributors are not able to change previous contributions, whereas on a wiki it is possible to change previous contributions. Third, the intention in the school context was primarily to ‘teach’ the students and in the researcher context it was to draw on the knowledge of the researchers.

Despite these differences, an analysis of the contributions both to the discussion boards and to the wiki, in terms of a) the extent and patterns of contributions and b) the quality of the contributions, reveals remarkable similarities. In both, there was some level of success in that the intended outcome was reached. However, in both, there were fewer contributions than hoped for, and most of these were made in short bursts of activity. Further, the quality of a large proportion of the contributions in both was disappointing, and tended to reflect the individual’s point of view rather than a carefully constructed (and evidenced) argument.

We suggest that the reasons for this are complex but are primarily related to two factors; the nature of the knowledge that was being built and the way the activity was set up. The knowledge in the first example tends to be value-driven, and it can be difficult to construct an argument, for example, against a statement of belief. In the second example, the knowledge was a vision and we suggest that it is unlikely that one academic would challenge the vision of another. In terms of the way the activity was set up, in the first teachers tended to begin a discussion with a question to elicit beliefs and it is not perhaps surprising that the students contributed beliefs; in the second, the wiki was populated before the beginning of the initiative with relatively long, well crafted paragraphs which were perhaps difficult to pick apart and question.

References


Wishart, J, D Green, M Joubert and P Triggs. (2009). Discussing ethical issues in school science: an investigation into the opportunities to practise and develop arguments offered by different online and face to face discussions. Proceedings of the ESERA conference, Instanbul.

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