New ways of using technology for organizational learning: classroom explorations

This article examines how interactive technologies may enhance organizational learning, particularly related to social factors like group dynamics and power relations (Vince, 2002; Sinclair, 2007). Management learning is a well suited setting for exploring this topic, as we have all these factors in play in the class, and students are to be prepared for handling learning in their subsequent work practices. Prospero and Gioia (2007) noted that a 'virtual generation' of students has emerged, using all kinds of interactive technologies, and this challenges our matching of teaching styles with their new learning styles. In this paper we study the introduction of interactive technologies and its impact on learning within and between classroom settings.

We are particularly interested in how introducing interactive technologies influences group dynamics. First, this is motivated by one of the authors' experiences from two rounds of teaching a bachelor course on the challenges of managing entrepreneurial ventures through phases of growth. We think that strengthening participation and interaction can help the students' learning processes, and we want to examine what happens both in the classroom and between the sessions when we introduce new interactive technologies. Second, taking a practice-based approach (Nicolini et al., 2003) we are interested in the relationship between practices of organizing, change, learning and politics. We seek to add to our understanding of how the social aspects of learning are influenced by interactive technologies. Do students feel more able to raise their voice in class discussions? Do they interact more between classroom sessions, and does this enable them to share their knowledge and experiences?

We will draw upon three streams of research: First, studies of entrepreneurship learning emphasising the need for close connection of theory, practice and reflection (Pittaway and Cope, 2007; Edelman et al., 2008; Sarasvathy, 2001). We explore how interactive technologies could strengthen these aspects of entrepreneurship learning. Second, literature on learning technology and networked learning, from which we learn that it is important to match learning and teaching styles (Prospero and Gioia, 2007) and to integrate the technology with the course (Goodyear et al., 2005). Moreover, Arbaugh and Benbunan-Finch (2006), show that social aspects are crucial for online collaborative learning. Strobel and Nicolaidou (2006) suggests that weblogs could strengthen self-regulated learning processes and supporting student reflection, while Donovan and Lee (2006) argue that weblogs could be used to stimulate collective learning and collaboration.

Third, we will draw on research concerned with group dynamics, critical reflection and action learning. Vince and Martin (1993:212) state that contact between people is a political process. Sinclair (1997) emphasises how teacher acquire authority through different sources of power, while Sinclair (2007) offers a critical perspective by looking beyond individual actors and identifying the structural ways that pedagogical practice is disciplined. Vince (2002) uses critical reflection in a collective way emphasising power relations. Simpson et al. (2000) argue that an important aspect of learning is to engage with what they call "defensive group dynamics". However, few have studied the impact of ICT on collaborative learning and group dynamics.

Research design

Morris and Ogan (1996, in Prospero and Gioia, 2007) made classifications of internet technologies in terms of (a) asynchronous download (e.g. websites), (b) asynchronous communication (e.g. blogs) and (c) synchronous communication (e.g. chats and online gaming). We have chosen tools close to each of these categories; both to explore different technologies and to provide tools that do not overlap too much. The Blackboard learning platform will be used to set up a mid-term peer-review process on a draft of the term paper (a). A blog has been started to support preparation and discussion of the curriculum of classroom sessions, and as a publishing channel for student presentations (b). Finally, we will use Twitter to for real-time communication and to trace the conversations back in time for all the participants (c).

This is an interventional research design (Marshall and Reason, 1997). We will use participant observation as the process unfolds, together with interviews and a small questionnaire before and after the course. While one of the authors is the lecturer, and thus doing the participant observation, another of the authors will take responsibility for interviewing to avoid too 'biased' relationships between the interviewer and the interviewee during 'evaluation' by the students. The third author will be involved in designing the study, interpretation and writing.

Conclusion

This paper aims at contributing to our understanding of group dynamics during learning and innovation, with a particular emphasis on the organizing role of interactive technologies. Our case illustrates how innovative technologies may be used to enhance entrepreneurial learning. We will draw upon different streams of research to produce richer descriptions of

entrepreneurial learning, new technologies, group dynamics and power relations. Finally, the paper may have practical implications that can be useful for future teaching.

References

Arbaugh, J.B. and Benbunan-Finch, R. (2006), 'An Investigation of Epistemological and Social Dimensions of Teaching in Online Learning Environments', *Academy of Management Learning and Education*, 5(4)

Chia, R. and Holt, R. (2008), 'The Nature of Knowledge in Business Schools', *Academy of Management Learning and Education*, 7(4)

Donovan, L.L. and Lee, D.C. (2006), 'Using blogs and podcasting to facilitate delivery and self/peer evaluation of oral presentation assessments', *Learning Technology 8(4)*

Edelman, L.F., Manolova, T.S., and Brush, C.G. (2008), 'Entrepreneurship Education: Correspondence Between Practices of Nascent Entrepreneurs and Textbook Prescriptions for Success', *Academy of Management Learning and Education*, 7(1)

Fletcher, D.E. and Watson, T. J. (2007), 'Entrepreneurship, Management Learning and Negotiated Narratives: 'Making it Otherwise for Us—Otherwise for Them'', *Management Learning*, Vol. 38(1): pp.9–26

Goodyear, P., Jones, C., Asensio, M., Hodgson, V., and Steeples, C. (2005), 'Networked learning in higher education: Students' expectations and experiences', *Higher Education*, 50

Jones, C., Connolly, M., Gear, A. and Read, M. (2006), 'Collaborative Learning with Group Interactive Technology: A Case Study with Postgraduate students', *Management Learning*, 37(3): pp. 377-396

Marshall, J. and Reason, P. (1997), 'Collaborative and Self-Reflective Forms of Inquiry in Management Research' in Burgoyne and Reynolds (eds) *Management Learning: Integrating Perspectives in Theory and Practice*, London, Sage.

Pittaway, L. and Cope, J. (2007), 'Simulating Entrepreneurial Learning Integrating Experiential and Collaborative Approaches to Learning', *Management Learning*, Vol. 38(2): pp.211–233

Prospero, L. and Gioia, D.A. (2007), 'Teaching the Virtual Generation', *Academy of Management Learning and Education*, 6(1)

Salmon, G. (2000), 'Computer mediated conferencing for management learning at the Open University', *Management Learning*, 31(4), pp. 491-502

Sarasvathy, S. D. (2001), 'Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency', *The Academy of Management Review*, Vol. 26, No. 2: pp.243-263

Simpson, P., French, R., and Vince, R. (2000), 'The Upside of the Downside: How Utilizing Group Dynamics can Support Learning in Groups', *Management Learning*, 31(4): pp. 457-470

Sinclair, A. (2007), 'Teaching Critically to MBAs: Experiences From Heaven and Hell', *Management Learning*, 38(4): pp. 458 - 472

Strobel, J. and Nicolaidou, I. (2006), 'Blogs as ePortfolios – utilizations of a generic tool for a specific context', *Learning Technology*, 8(4)

Vince, R. and Martin, L. (1993), 'Inside Action Learning: An Exploration of the Psychology and Politics of the Action Learning Model'. *Management Education and Development*, Vol. 24 (3): pp.205-215

Marshall, J. and Reason, P. (1997) 'Collaborative and Self-Reflective Forms of Inquiry in Management Research' in Burgoyne and Reynolds (eds) *Management Learning: Integrating Perspectives in Theory and Practice*, London, Sage

Nicolini, D., Gherardi, S., Yanow, D. (2003): *Knowing in organizations. A Practice-Based Approach.* M. E. Sharpe Inc.

Simpson, P., French, R. and Vince, R. (2000), 'The Upside of the Downside: How Utilizing Defensive Dynamics Can Support Learning in Groups', *Management Learning*, vol.31(4) pp.457-470

Vince, R. (2002), 'Organizing Reflection', Management Learning, 33(1): pp.63-78.