Learning in the Extended University: An Overview

Shirley Booth

Lund University, Sweden Shirley.Booth@ll.lu.se

ABSTRACT

A research project is to be presented in this symposium, organized according to three component studies. All relate to learning in networked learning situations, which can be characterized as extending the university outside its normal field of educational activity in several respects. This overview is concerned mostly with setting the scene in terms of the background to the project and the research approaches we are adopting and adapting. The remaining three papers take up aspects of the individual studies.

Keywords

Network learning, outreach initiatives, diversity, flexibility, phenomenography, activity system

INTRODUCTION

Universities and their staff are facing multiple new challenges as society offers them new roles as motors for development. They are taking on educational outreach tasks in greater numbers and with wider ambitions to shape the world we live in. Life-long learning, internationalization, educational flexibility, diversity among target groups, trans-disciplinarity in courses and research efforts, competence development in the work-place and innovative use of information and communication technologies (ICT) are some of the issues that are of concern. And at the centre of these concerns is the shift from a focus on teachers in isolation in the academy to students in networks in society.

This symposium is based on three studies that are being carried out at Lund University, on learning in three different distance courses which, to different degrees, have two similar qualities generally associated with distance education: flexibility and diversity. We are taking as a common starting point that learning takes place against a context that is individual, and meaning is constituted in the meeting between the individual, with their history of learning and learning situations, and the current learning situation, its knowledge and the other people taking part in it.

The project we are presenting focuses on learning in situations where the university extends its boundaries beyond its traditional campus to offer various kinds of distance learning opportunities, in line with the outreach ambitions of the university. Networks of teachers and learners are linked by internet, post and telephone, across dimensions that were once taken for granted as fixed: time, place and culture.

The three learning opportunities we have chosen are:

- IIIEE-YMP: a series of Young Masters Distance Education Programs (YMP) for school students from all over the globe. The long-term goal is to develop a global understanding of the global issue of environmentally sustainable economic and industrial development. (http://www.ll.lu.se/research/lieu/IIIEEeng.htm) (Hansson & Nordén, this conference)
- LUMA-GIS: a two year Masters programme (LUMA-GIS) for professionals and traditional students from all over the world, that is free of charge, mediated by internet, at a flexible pace, and optionally worked at individually or in groups. The programme is multidisciplinary; diverse and international, since the need for training is global; both theoretical and practical, involving mathematics and practice; and flexible, so that students can work where and when they need to. (http://www.ll.lu.se/research/lieu/GISeng.htm) (Antman, Larson & Pilesjö, this conference)

• Kommunal-RUHFS: a course designed for adults who are considering taking up studies at university, in collaboration with the largest Swedish trade union of local authority workers. It aims to introduce participants to the study forms and cultures of the university. The long-term goal is to raise the level of competence in the workplace, and prepare them for life-long learning. (http://www.ll.lu.se/research/lieu/RUHFSeng.htm) (Wigforss & Booth, this conference)

Features that these learning opportunities have clearly in common are flexibility of various kinds, diversity among participants, a challenge to earlier experience, and open learning in case-study, problem-based and project-oriented group work, all mediated in various ways through ICT, including internet and telephone seminars. While learning as constitution of meaning is central, there are three features of learning we feel are especially important: the character of the constituted context for learning, temporal and spatial flexibility of opportunity for learning, and the meetings that take place in a diverse population of learners. The overall goals of the project are therefore:

- to analyse and describe learning in the sense of constituting meaning from a variety of experiences and potential paths as it is found among the students of the individual courses we are studying;
- to analyse and describe the context for learning as it is experienced by individuals and groups when course participation engages with their personal educational histories and their current situations;
- to investigate the notions of flexibility and diversity as they are built in and assumed by the courses and the teachers, and as they influence the experienced context and learning;
- to bring the results of the individual studies together, to compare and contrast the learning afforded there, and to relate them to networked educational initiatives in a wider sense;
- to turn the results to considerations of pedagogical design and support.

In this symposium the three studies will be described with some of the results that have been achieved thus far. This paper, however, is concerned with the methodological aspects of the studies, which have some commonalities as well as individual specific approaches.

THE RESEARCH APPROACH THAT HAS EVOLVED

A phenomenographic starting point

We are characterizing knowledge as relational, in the phenomenographic tradition: the learner is in a complex relation with the phenomenon, or object of learning, to which their attention is directed. Learning is characterized as "participation in the ongoing and constantly recurrent constitution of the object of learning" (Marton & Booth, 1997, p162), which highlights the dynamic quality of learning and its iterative, never-ending nature. To put it more concretely, learning is taking the material and tasks, the questions and discussions, that are brought to the student's attention by the course and making sense of it all in the light of personal experience, finding a path through it that satisfies one's curiosity and needs.

This perspective on learning is particularly interesting with respect to the flexibility and the diversity that is offered by the three courses in focus, where students are free to take different paths through the course and to create personal paths either for themselves or in collaboration with others. We can see the outcome of the learning in terms of the ways students understand or experience the phenomena that are central to each course, and we can see the process of learning as the multiplicity of ways in which such understandings are reached. What we, as researchers, need to develop is how to go about analysing and describing the variation of ways of understanding, and variation of ways of reaching them.

With a phenomenographic perspective on learning, we can describe the process of learning analytically, as exploring experienced dimensions of variation around critical phenomena in the field of knowledge, when an aspect is brought into focal awareness (Marton & Booth, 1997). There are three vital aspects to such an analytical description. First, variation is an essential aspect of learning: learning occurs (things are seen in distinctly new ways) when a dimension of variation opens around a phenomenon or aspect of a phenomenon that once was taken for granted. Second, discernment is the act of seeing this no-longer-taken-for-granted phenomenon or aspect of a phenomenon in a new light, and, third, contemporaneity of seeing both the once-taken-for-granted and the no-longer-taken-for-granted is demanded for the dimension of variation to open. Lack of understanding is thus linked with being unaware of the potential for variation – seeing only that which is

taken for granted. Learning situations can be designed to reinforce such taken-for-grantedness or, which is highly preferable, to challenge it, to open the dimension to deliberate reflection. The task of the researcher is to delve into the ways the learners experience critical aspects of the learning situation and describe the variation in order to problematise the taken-for-grantedness. The ways in which this is possible is a further aspect that has to be problematised in developing the research process.

The context of learning is particularly interesting in the diverse situations that distance learners are in – sometimes isolated and sometimes in groups, some experienced in the form and some novices, some well-educated, others not so – and the diversity that the courses themselves incorporate. The context that is constituted from the individual's history and surroundings in the meeting with the course and its demands can be studied in much the same way as the outcome and process of learning is studied. In the latter case we relegate the context to the background and focus on the relation between learner and phenomenon; in the former case we neglect the subject matter temporarily and focus on the complex relation between a learner and her context, or learners and their contexts. Thus we need to study the relationship between learners and the contexts for learning, and to develop ways of going about this.

A shift to activity considerations

At the individual level, the phenomenographic approach enables us to analyse and describe the participants' experience of learning, which is the main driving force of our work since learning is, essentially, an individual enterprise. However, this individual learning takes place only to the extent that it is supported by the context that the course participants experience, constituted from the meeting between the pedagogical environment created within the course (the intended acts and object of learning), and their histories of earlier study and learning (of similar and different tasks and objects), all within a socio-intellectual setting. This demands that we extend the phenomenographic and individual approach of our research, which brings the relationship between the learner and the acts and objects of learning into focus, to encompass and support focus on even the context – or more precisely, the contexts – of learning. This broader picture of the learner acting in a socio-historico-intellectual framework, in focal or taken-for-granted relationships with its features and actors, becomes important for a more holistic understanding of learning. And so we have turned to activity systems to extend our theoretical framework, while not neglecting to problematise the coherence of the two research paradigms.

At the collective level, it is appropriate to consider learning in a collective situation, drawing on the activity system as described by Yrja Engeström, as the context of an activity (e.g. Engeström, 1993; Engeström, 1999). The activity of learning is centred on the learner (L) directing attention to the object of learning (OL), via the tools (T) both intellectual and physical that are perceived to be relevant – computers, telephones, libraries, books and appropriate language among other things, see figure 1 below.

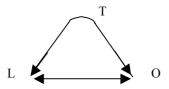


Figure 1. The learning activity system

Engeström extended this model of learning to embrace a social and cultural dimension, which in the concrete case of our courses brings into the model the interchanges between course participants and between them and the tutors, the assumptions about studying that have evolved from earlier experience and which have sedimented into the rules of study behaviour and ways in which different actors take – and are expected to take – various roles in the overall activity of studying and learning.

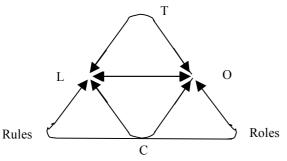


Figure 2. The learning activity system in a socio-cultural setting

We see here a model of complete activity system (figure 1), where the act of learning is reconstrued as a relationship between the learner and the object of learning, and the nodes of the model have been reconstrued in terms of the experience of learning, which empirical studies of the situation can elaborate in the phenomenographic manner. This can be seen as an experiential activity system of learning, which models the context for learning. Note that the only relations indicated are those between the learner and the object of learning – all the features of the system are related to the learner and what is learned – and that some nodes of the model are not joined since they are not envisaged in the same learning relationships as those shown. Nor are meanings attached to the triangles formed by the relationships as in Engeström's model, but this is intended to represent an activity system of learning, stripped to the essence of learning in situations that are typical of networked learning activities.

While research in the field of activity systems is generally tuned to examining groups of people who are engaged in a common activity, or an apparently common activity, we are treating the activity system with a phenomenographic turn to describing variation in ways of experiencing the constituted context of learning. The context of learning is seen as related to ways in which the tasks and content of learning are experienced. Now we can return to the compatibility of phenomenography, with its emphasis on capturing the variation of ways on which people experience phenomena they meet in educational settings, and activity systems, which emphasize the interactive qualities of activities in a social and cultural context. We have turned the activity system model of Engeström into an experiential model, attempting to construe it from the perspective of the learners, in terms of the variation of ways in which the qualities of the system are experienced. And, in the next stage, we can turn to ask what consequences this variation might indicate for the success of the learning effort and for the design of future learning environments.

A linguistic turn

The data which can underpin analysis, whether in the interests of the phenomenographic or the activity system views of learning in these pedagogical situations, is essential linguistic – recorded and transcribed interviews, telephone meetings, chat sessions or web-based for a for discussion. In phenomenographic research the empirical textual material that has been collected is pooled into one large textual resource, and the researcher is faced with the analysing it according to ways in which extracts make sense seen in the context of a single data collection on the one hand, and in the context of other related parts of texts on the other hand, and the way they fit together through similarity and difference. In an iterative process extracts are brought into categories that have bearing on the phenomenon under investigation, which are then described by the researcher and illustrated by text extracts.

This is a well-documented process, but our studies highlight some problematic areas that need to be addressed further. The cultural and linguistic diversity of the participants in two of the studies has led to considerations of intercultural communication and interviews (Shah, 2004), and the ways in which misunderstandings can influence the relation between interviewer and interviewed and hence the ensuing dialogue. These misunderstandings require very often a process of repair that can be seen as an inherent feature of all dialogues. The mistakes throw novel and often unexpected new elements into the interviews (Stern, 2004). The third study is of adults entering the academic world, and thus the ways in which language takes on the nature of academic discourse is a central interest, as is the ways in which this new awareness of language is expressed in everyday life.

A third role for language has emerged from the phenomenographically based work going into variation theory and ways in which use of language can bring variation to bear on central phenomena in a learning setting, and

thus support learning (Marton & Morris, 2002; Booth & Hultén, 2003; Marton & Tsui, 2004). The forms of language data that we are working with are various – interviews, open questions on evaluation questionnaires, chat sessions, course papers, interviews – and we need to work further with the potential that these forms offer.

CONCLUSION

The symposium concerns work in progress, relating mostly to the first two goals in the list with which this paper opened. We hope that the approaches and results that we can present and discussions that result can support us in moving forward towards the third goal, to understanding better what roles diversity and flexibility play, and can play, in learning in networked situations, and to our fourth and fifth goals, when we hope to integrate our studies to produce more generalized knowledge of relevance to the learning in networked learning.

ACKNOWLEDGMENTS

The research is financed by the Committee for Educational Science of the Swedish Research Council, by the Special Committee on Recruitment to Higher Education at the Swedish Ministry of Education, Research and Culture, and the Centre for Learning Lund (Lärande Lund) at Lund University.

REFERENCES

- Antman, L., Larson, L., and Pilesjö, P. (2006). Networking or going solo? Understanding the Learner's Perspective in the Flexible Learning Environment (this conference).
- Booth, S., and Hultén, M. (2003). Opening dimensions of variation: An empirical study of learning in aWebbased discussion. *Instructional Science*, **31**, 65-86.
- Engeström, Y. (1993). Developmental Studies of Work as a Testbench of Activity Theory: The case of primary care medcal practice. In S. Chaiklin, & J. Lave (Eds.) *Understanding Practice. Perspectives on Activity and Context.* CUP, Cambridge.
- Engeström, Y. (1999). Activity Theory and Individual and Social Transformation. In Y. Engeström, Miettinen & R-L Punamäki (Eds.) *Perspectives on Activity Theory*. CUP, Cambridge.
- Marton, F. (1981). Phenomenography describing conceptions of the world around us. *Instructional Science*, **10**, 177-200.
- Marton, F., and Booth, S. (1997). Learning and Awareness. Lawrence Erlbaum Associates, Mahwah, NJ.
- Marton, F., and Morris, P. (Eds.) (2002). *What matters? Discovering critical conditions of classroom learning*. Acta Universitatis Gothobergensis, Göteborg.
- Marton, F., and Tsui, A. (Eds.) (2004). lassroom discourse and the space of learning. Lawrence Erlbaum Associates, Mahwah, NJ.
- Nordén, B. and Hansson, B. (2006). Meeting over cultural boundaries: networked learning for sustainable development (this conference).
- Shah, S. (2004). The researcher/interviewer in intercultural context: a social intruder! *British Educational Research Journal*, **30**, 549-575.
- Stern, D. (2004). The Present Moment in Psychotherapy and Everyday Life. W.W Norton & Company Inc., NY.
- Wigforss, E., and Booth, S. (2006). Experiencing the University Context (this conference).