

Interaction Repertoire in a Distance Education Community

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ABSTRACT

This paper presents results from a study focusing on text-based electronic interaction in a distance educational setting. The analysis of the interaction identifies three typified genres, labeled *Query*, *Feedback* and *Smalltalk*. Together they constitute a shared interaction repertoire with marks of a new social landscape for education with changes in roles and behaviours that are important to grasp for designers as well as teachers.

Keywords

Interaction, Community, Distance Education, Genre, Social Situation

INTRODUCTION

Over the last years, the Internet has become a melting pot where traditional media has merged and collided, resulting in fruitful combinations and new functionality (Braa et al. 2000). From the perspective of Distance Education this means a technological platform with support for dynamic distribution and organisation of hypermedia course material, but also support for more flexible interaction, e.g. chat-rooms, computer conferences and news groups. The use of ICT should not be understood merely as neutral improvements in educational efficiency, but also in terms of changes to the social systems. When communicative patterns change, social and cultural change follows (Sproull and Kiesler 1991). A similar point is made by Meyrowitz (1985) who claims that the use of an electronic media changes and restructures the social situation with respect to the available social information, the audience and the different roles that defines the situation. And indeed, the perhaps most important outcome from using the Internet in Distance Education, is the social dimension it has introduced. The ease, at which informal contact can be initiated amongst students and teachers, is in strong contrast to the demand of structure and planning, necessary in distance education based on correspondence or teleconferencing. Subsequently, the web has become a media where *learning communities* can form and evolve.

In previous research on interaction within an educational setting, the focus is often set on interaction processes directly relating to the technology-mediated collaborative learning activities themselves. For instance, Baker et al. (1999) explores how students need to engage in processes of grounding, i.e. the interaction necessary to establish sufficient common ground to complete a collaborative task and Wasson and Mørch (2000) presents collaborative patterns expressed by small groups of students using various types of groupware. Furthermore the research has been dominated by an emphasis on control and rigour, using voluntary subjects and constructed tasks for experiments with short duration. There is a need to complement this research with studies that expands beyond such narrow foci to encompass longitudinal studies of all processes within the practise of education, and to study how groups of "real" students in real situations choose to use and make sense of ICT. Such a holistic perspective is argued to be vital in order to understand today's distance education as a social practice (Wenger, 1998) where motivation, engagement (Nulden, 1999) and relations play a central part in a distributed learning community.

THE CASE

The object of the study presented in this paper is a distance course in Mathematics and Statistics. It is the first course in a three-year program for 52 students located in six communities in the vicinity of a Swedish University college. The primary technologies used in the course were videoconferencing and a system for web based education, called DisCo. The system provides a web site with course material and support for communication, primarily through email and a threaded discussion forum. Drawing on the concepts of genre repertoire proposed by Yates and Orlikowski (1994) the text-based interaction between students and teachers were analysed in order to identify typified patterns that could be said to constitute genres of communication.

The email interaction and the entries on the discussion board showed three fairly distinct genres of communication (*Query*, *Feedback* and *Smalltalk*). Together these genres constitute a repertoire for electronic interaction within the course community. The elements and characteristics of this repertoire paints a picture of how community members (students and teachers) accomplish their work, and in what ways the use of electronic media associates to changes in work practice and interaction norms (Orlikowski & Yates 1994, Meyrowitz 1985).

DISCUSSION

The Query genre is at the core of the collective goal of meeting the objectives of the course curriculum. In doing so students use their community of peers and teachers as collaborative resources, (Fjuk, 1998). In addition, the rich occurrence of Smalltalk and Feedback that were found shows how students are motivated to engage in the creation and maintenance of a mutual community. This community building involves several mechanisms of establishing a “we-notion”, thereby creating boundaries and identity for the community, (Wenger, 1998). It also involves the development of a shared vocabulary and indexicality (Star, 1999). Smalltalk is argued to relate to the processes of creating identity and interpersonal relations. Feedback, is about the ability to influence and shape the community culture, where discussions could be seen as negotiations of what constitutes the norms of the community, (Wenger, 1998, Orlikowski & Yates, 1994). The discussion forum provided a shared arena where the community history could be exposed, and an interaction repertoire that made common sense to the community could be negotiated.

The data is not the result of a well-designed and controlled experiment, but rather an emergent and non-moderated expression of student-initiated interaction, which is argued to add substantial validity to the interaction repertoire as being rooted in realistic conditions. This does not imply that the genres are generic and exhaustive, and the most interesting aspect is not the composition of genres, but rather the actual use (Orlikowski & Yates 1994). The novelty of the social situation (Meyrowitz 1985) is partly relating to the way the genres coexist, thereby mixing activities traditionally typical for a classroom, an evaluation questionnaire and a student café. It also relates to the public nature of a shared discussion forum where the entire community is the audience of activities that are traditionally more private.

This could imply that design of software and course concepts should appreciate the potential of moving beyond the roles and behaviours of traditional schools and classrooms. Embracing and inviting socialising behaviour such as the Smalltalk and Feedback genres found in this study, rather than isolating it to separate digital cafés not only helps in attracting students to common discussions but also aids in the negotiation of a common ground that is essential for collaborate learning.

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