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Task-oriented collaboration: not just what is inside the task, but what the task is inside of

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Abstract. In this paper a case is made to extend concern for the quality of collaboration to include more serendipitous and intermittent exchanges. An overarching goal of such a concern is to loosen the boundary between the formality of learning as 'study' and the informality of learning as it occurs within the 'everyday'. The relevance of new, open format learning spaces in higher education is considered in relation to this ambition.

1 Introduction

The computer-supported collaborative learning (CSCL) community have helpfully brought about a vigorous interest in understanding collaboration as a social-psychological process. In the early days of CSCL (e.g., Crook, 1994; Koschmann, 1996, O'Malley, 1994), the learning encounters that were of special interest were those that involved small groups (or simply pairs) of students working together at a computer screen. As the networking of computers become more widespread, interest in collaboration expanded to embrace forms of synchronously or asynchronously networked discussion. In both of these contexts – face to face and networked – the object of study was generally a circumscribed 'task'. Face to face collaborators might engage in a short episode of joint problem solving. Networked collaborators might pursue a similar focus, although they would do so in the more

distributed organization that must be managed within spatial separation of temporal asynchrony.

Of course, such designs do usefully reproduce commonplace conditions of classroom life. However, sometimes in classrooms - and often in the world outside - collaboration is experienced in a more fragmented, serendipitous, and improvisational way. Moreover, it may not be directed towards goals that are precise or goals that perfectly overlap for participants. Yet these social interchanges – these ‘co-ordinations’ of shared interests - may still be termed ‘collaborative’. If, for example, an institution makes an effort to provide designs and resources that encourage such social co-ordinations, then we might say that institution is offering “a collaborative experience of learning” (Crook, 1994).

The task-orientation of traditional CSCL research is poorly prepared for making sense of collaborations that occur within such loose couplings. If those are to be better theorized, what is needed is less an understanding of social processes that are strongly task-oriented and more an understanding of the contexts in which putative and sometimes disconnected tasks interleave and take shape. Or put another way, research is less a matter of what is ‘inside’ tasks (as circumscribed shared goals) and more an understanding of what tasks (overlapping, multiple goals) are inside of. To define the nature of such contexts it helps to highlight the nature of ‘study’ as a species of learning and to acknowledge a continuum of in/formality that can be constructed around it. Having done that, an example will be explored of a ‘collaborative context’: that is, a setting within which ‘tasks’ (and ‘interests’ and ‘trajectories’) may be addressed collaboratively.

2 Study as a species of learning

The English terms “learning” and “study” are not always clearly distinguished. Yet they express a distinction that is worth protecting. “Learning” is perhaps the parent term. It covers a whole range of circumstances – incidental and accidental, as well as the more intentional – circumstances whereby we are changed in ways that shape how will tend to act in the future. “Study”, on the other hand, is a distinctive kind of learning that is more narrowly defined: in particular, it is typically deliberate. It suggests the learner embarking on something more contrived: a specific scenario-for-learning. Such a scenario will usually involve an engagement with resources in a manner that is decoupled from circumstances of relevant use, appropriate place, or immediate need. Such relatively de-contextualised learning is, of course, a characteristic of schooling.

Human beings are good at study. It calls upon our important and shared ability to achieve learning through actions that are un-situated (Bereiter, 1997), or out of natural context. When institutions design such circumstances for learning, one significant challenge is to arrange that the products of un-situated study can be effectively coordinated with experiences of authentic practice from the relevant

subject-matter domain. Real depth of knowing surely depends upon how education orchestrates such a balance of situated and un-situated experience. However, that particular variety of blend is not the subject of the present paper. Instead, concern here is with a different sort of balance: namely, how the various familiar states of studying (especially talk) can be more seamlessly integrated into a background that we might simply call ‘everyday life’.

This concern can be put another way: namely, in terms of bringing about shifts in ‘learner identity’. To become a student of, say, History or Psychology is a matter of individuals allowing the dispositions of study to enter naturally into the ongoing flow of their lived experience. The discourse of these academic subjects thereby comes to penetrate their everyday life. To be a Historian or a Psychologist is – to some extent at least – a matter of interrogating ones world through the modes of inquiry that those disciplines invite. It involves living out the subject in that sense.

3 Designs for enculturating study into the everyday

Yet, in practice, such shifts in personal identity are not easy to achieve. How is the motive for study to be made more continuous with the student’s more everyday concerns and fancies? How might personal identity be shaped to accommodate more comfortably the demands of thinking through the lens of some academic discipline?

Education’s engagement with new technologies could be regarded as a recurring ambition to mediate this transformation. Here the vision is one of appropriating new media: taking media that enjoy popular appeal and aligning them with content or practice that relates to some curriculum (Cuban, 1986). Thus, television affords ‘educational broadcasting’, handheld personal devices afford ‘mobile learning’, and – most compelling of all perhaps – the Internet affords ‘personal inquiry learning’ or participation in ‘communities of practice’. Undoubtedly, these technologies make valuable contributions to the experience of education. Moreover, they have evolved to be increasingly powerful in that respect. So, whilst watching the Discovery Channel is quite a long way from being a Zoologist, the learner who uses the internet to explore animal migration patterns in relation to climate change data is surely getting a lot closer.

Typically, developing technology as an educational opportunity in this sense is achieved by arranging that both recreational and study resources should converge within the space of a single medium – television, mobile phone, internet etc. This simple proximity of resources then may prompt the learner to enter into the educational sector of this shared space. Moreover, learners’ confidence in manipulating that shared medium for recreational motives is potentially recruited into more educational purposes. However, using technology to lever such convivial engagement with curriculum content is not without problems. The

proximity of resources may encourage a pattern of time investment that is not balanced in the direction desired. It may be more towards the recreational than the academic. Educational resources that were previously segregated from recreation (for example, in libraries, classrooms, and other contexts) are now more closely integrated with resources that may be powerful distracters from study. The consequences of this may be made apparent in the well-documented student habits of intense multitasking in personal computer settings (Crook and Barrowcliff, 2001).

4 Enculturing collaboration as a form of study

The pursuit of effective study is partly a matter of the learner seeking the most productive interactions with relevant disciplinary material – symbolic resources as well as physical artefacts, or more concrete material. But effective study is also a matter of interacting socially. That is, study will involve periods of collaboration with other students. Moreover, doing so involves a parallel challenge to the one sketched above. It is a challenge of enculturing the curricular into the everyday. The process of becoming a historian (or psychologist, or whatever) is a matter of allowing the collaborative talk of a discipline to more often penetrate the discourse of everyday life. Not necessarily to overpower other discourses, but to become a comfortable and versatile part of an individual's discursive repertoire. At the very least one would hope to find that such collaborative talk no longer always needed to be segregated into places and occasions where it was formally orchestrated as 'study'

There is a design challenge here – one that echoes the ambition of having new technologies lever curricular material into the breadth of lived experience. Just as we seek media that allow an interleaving of curricular materials into the playful arena of everyday life, so we need spaces whereby talk that has a curricular focus can be accommodated more comfortably into the everyday. Accordingly, any research concern for the 'quality of collaborations' ought to include attention to the design of environments that stimulate this enculturation of study-oriented conversations. However, research on collaborative learning has tended to concentrate on more traditional arrangements for such talk. The iconic arrangement for a researchable collaboration is a short, self-contained episode of joint problem solving: probably around a problem that is of limited relevance to the participants - who themselves may have no authentic agenda of shared needs. The idea of collaborative talk as something that might arise in a less choreographed manner seems to attract scarce interest. And yet working to embed such conversation into the routine exchanges of 'everyday life' might be an important step for loosening the segregated nature of study as a distinct species of learning.

The present discussion is particularly concerned with the circumstances of higher education. A starting point for the necessary research interest in that context must be a recognition that spontaneous collaborative learning is relatively rare among undergraduates (e.g., Crook and Light, 2002). Those self-report accounts of study practices are complemented by recent records we have collected in the form of audio diaries. Here, students keep a running commentary of their study and reveal it is rarely organised as a collaborative experience.

In some part, this pattern of preference may reflect the competitive and divisive nature of prevailing assessment regimes. However, it may also reflect the way in which out-of-classroom study is encouraged to migrate to solitary and silent spaces (cf. 'private' study) – such as libraries or study bedrooms. Yet this version of extra-classroom learning spaces is being challenged by new designs for libraries and resource centres. At the heart of this new design agenda is an interest in collaborative learning. This may be in some part inspired by a modern move of theory towards 'social constructivism'. But it will also be inspired by a contemporary political imperative for cultivating '21st century learning skills' – a package of competences that prioritises the ability to work comfortably in teams.

5 New spaces for social learning

These forms of learning space remain relatively unusual and data concerning the way in which they are used is rare. However, our own fieldwork suggests a mixed picture. For many students, spaces for study that actively cultivate unmanaged conversation are a source of distraction. Not simply by virtue of exposure to other people's noise (this is often deflected by the insertion of MP3 headphones – ironically isolating the learner from their social space). It is distracting because the form of conversation that too readily develops can be more recreational than curricular. In which case, any visit to a study space for the purposes of managing learning ambitions may be too quickly de-railed. And yet for other learners, the availability of this space has created the only condition in which they would have chosen to engage in any study at all out of class. However, this is less because of its potential for sustaining collaborative (study) conversation, and more because the space creates a kind of generic but welcome social ambiance.

Such ambiance is 'co-labour' in surely only the broadest sense. Certainly it identifies a concealed form of the social as it arises in relation to the support of learning. However, if an attraction to such ambiance is researched as part of a trajectory – one heading towards interactions that are more actively collaborative, then it becomes an important phenomenon to understand in relation to the emergence of quality collaborative exchanges. It also becomes an important step in the design of learning environments that encourage a more productive synergy between the curriculum and the everyday.

6 References

- Bereiter, C. (1997). 'Situated cognition and how to overcome it'. In D. Kirshner & J. A. Whitson (Eds.), *Situated cognition: Social, semiotic and psychological perspectives*. Hillsdale, NJ: Erlbaum, 281-300
- Crook, C.K. (1994) *Computers and the collaborative experience of learning*. London: Routledge.
- Crook, C.K. and Light, P (2002) 'Virtualisation and the cultural practice of study'. In S. Woolgar (Ed.) *Virtual Society? - technology, cyberbole, reality* Oxford: Oxford University Press, 153-175
- Crook, C.K. and Barrowcliff, D. (2001) 'Ubiquitous computing on campus: Patterns of engagement by university students'. *International journal of human-computer interaction*. vol 13 no. 2, 245-258.
- Cuban, L. (1986) *Teachers and machines*. New York: Teachers College Press.
- Koschmann, T. (1996) *CSCL: Theory and practice of an emerging paradigm*. Mahwah, NJ: Lawrence Erlbaum Associates.
- O'Malley, C. (1994). *Computer-supported cooperative learning*. Berlin: Springer-Verlag.