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# THE EFFECTS OF FACILITATION ON PUNCTUATED EQUILIBRIUM IN E-COLLABORATION PROJECTS

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## ABSTRACT

*Information technology has transformed the “heartland” of education around the world. Classrooms are global, students international, but traditional methods and their adjacent challenges persist or are exacerbated in online schoolhouses. There is reason to believe that team performance of online students completing team projects can be significantly improved by the active participation of a facilitator. What could explain such improvement? Given the communication barriers that learners can experience using e-learning technologies, the skill of a teacher at facilitating an understanding of e-collaboration and the prescient need to facilitate collaborative skills at all times is essential to a successful educational result. There may also be generational learning style issues to consider. One practical, proven tool is progress reporting. This paper reviews the literature and reflects on author experiences in the online education of Management students at universities in the United States and Australia to draw theoretical connections with communication, leadership, and punctuated equilibrium relevant to contemporary educational practice. The implications of effective facilitation of student teams for Management education and management of student performance are explored.*

## KEYWORDS

Facilitation, Management, Teamwork, E-Learning, Collaboration, Leadership, Transformation

## TEAMWORK AND COLLABORATION

The punctuated equilibrium model of team work displays the natural performance lag teams experience during specific projects. Gersick (1991) transfers the work of natural scientists, Eldredge and Gould (1972), into an organisational context to show that teamwork does not occur as a gradual progression but as a series of stops and starts leading to skewed performance during the life of a task. While the model suggests that successful completion of team tasks can still occur on time despite punctuation, the negative consequences of sporadic effort can include rushing on the finishing touches and resultant quality control problems. This paper explores whether virtual teams that are effectively facilitated can lead to improved intra-team collaboration and earlier performance peaks which, therefore, regain the necessary time near the completion of a project to enhance the quality of outcomes. Further, whether facilitation of e-collaboration can help to overcome some natural barriers to interpersonal relationships, such as the

absence of non-verbal cues, including body language and response times, which can lead to conflict unless proactively recognised, interpreted, and managed. The implications, especially in the context of Management education, are explored.

## **TRANSFORMATION OF E-LEARNING AND COLLABORATION**

Comprehensive learning Management systems (LMS) such as WebCT Vista are one aspect of e-learning. Other applications experienced as background to this paper include voiceover internet protocol (VOIP) software, such as Elluminate Live and Macromedia Breeze, file compression and multimedia presentation software, such as I-Lecture and CaptureCam Pro, CD-ROM and web-based based learning objects, also telephone, SMS, and email. The latter few represent elements of the emerging “Web 2.0” platform, in which social interaction tools are merging with expanded processing and network power to enable richer mobile collaborations (Plaisted & Irvine, 2006). This aligns with pedagogical approaches in Management education which embrace e-learning in collaborative project work. One key outcome of Management education is the ability to function as a team member in order to produce high-quality work in a collaborative setting. The tools that functioning organisations use today for conducting daily business are mostly available for classroom education, and the best teachers are deploying the same tools in establishing assessment requirements for Management students.

There is a generational shift occurring at universities in Australia, the United States, and other developed nations. Digital natives (people raised in a high-speed, computerised, networked environment) are beginning to fill online classrooms and bringing with them a strong propensity for collaboration and teamwork, as well as increased levels of individuality and enterprise (Prensky 2001). Also called Generation Y or Millennials, among other labels (Buckingham 2006; Eisner 2005; Roberts 2006), this new generation is particular about the type of collaboration they prefer, especially upon entering an e-learning experience. Research suggests a supported environment is important to them since they are accustomed to having networked support in a technological environment (Martin 2005; Jorgensen 2003). While peer support is part of this, we have found that experienced facilitation provides the input needed to keep generation Y on track, while also providing the “space” needed for their individualism to manifest in relative autonomy. The paradox exists of having students who seem to be self-directed and demanding of space to construct their own learning, but requiring assistance almost on demand, as well as no small dose of guidance on the life skills of time management and critical thinking.

## **ROLE MODELLING: LEADER OR FACILITATOR?**

Our experience with student evaluations suggests Management students respond positively to a well-managed online unit. There is a kind of alignment to seeing good management in practice, even in a classroom setting. The suite of e-learning tools available for educational application is rapidly expanding and the opportunities for being an online learner are so ubiquitous as to be central even to the experience of traditionally enrolled on-campus students, and absolutely indispensable for non-traditional off-campus and continuing education students. The educator in the midst of this e-learning environment is faced with the choice to behave at times as a leader and at others as a facilitator, and the difference is embedded in degrees of collaboration.

Hansgren (1992) defines a facilitator as a “colleague” who works alongside the student. This aligns with leadership literature in some important ways which are relevant for our research into Management education for the purpose of practice informing pedagogy. Some traditional definitions of leadership incorporate notions that translate in Management education to a role of “the guide on the side,” while others adhere to the role of “the sage on the stage.” Drucker (1996), for instance, suggests that effective leaders are not preachers; they are doers. Kotter (1990 p.103) elaborates to contrast leadership as “coping

with change,” with management as “coping with complexity.” We could argue that the latter aligns more with the notion of a facilitator. The task of guiding students along the way is sure to add complexity compared with simply invoking change as a figurehead. Our experience with online teams completing complex Management assignments is that the teacher is more of a guide or facilitator through the complex task rather than just an assessor of the finished task. By their second year, most tertiary students are comfortable with the rigours of academic task completion but can be daunted when a figurehead teacher dictates virtual team work. To prescribe e-collaboration from on high and do no more to help teams collaborate leaves room for avoidable performance problems. Facilitation by the teacher is necessary if extended periods of sporadic equilibrium are to be avoided.

## **INTERVENTION TO ENHANCE INTEREST AND ENTHUSIASM**

A group of students languishing in a trough of punctuated equilibrium and separated by physical distance need motivation to engage with advanced e-collaboration technologies. Of course, internal motivation from the group would be ideal, but in the context of semester-limited assignment projects, such immediate initiative is not always guaranteed. If the goal of an educator is to assist students to pass the course, some strategic intervention by the facilitator is warranted. Creed, Zutshi, and Ross (2007) discuss, in the context of globalization, how relational issues become more central than peripheral, especially when functions are completed in virtual settings. Further, Vandenberg (1999) reminds us that human infants are hard-wired for relatedness. Even with such potential established, it remains the task of the Management educator to help make the social connections and release the relational genetics that can often lay dormant in the downward cycle of punctuated equilibrium. While personality differences will determine teaching style, usually, when facilitated connections are established, there is an improved performance as team members rise to the inherent human capability for collaboration.

One tool for reversing the downward cycle of punctuated equilibrium is the humble progress report. These authors note a remarkable and significant rise in student team activity and task progress when teams are required to submit a brief memo stating:

1. What the team has accomplished
2. What the team needs to accomplish
3. What the facilitator can do to assist

The communication imperative to respond to these three questions often establishes a “notional deadline” and stimulates the social connections causing reinvigoration of team effort. This aligns with research into reflective journals in higher education which show good correlation between tracking progress and achieving educational objectives (Woodward 1998; Uline, Wilson, & Cordry 2004; Thorpe 2004).

The issue of timeliness also emerges in other ways. Compounded by the fact that the new generation of Management students are accustomed to answers on demand, slow responses in asynchronous message systems can effectively raise the level of student frustration (Martin 2005). When facilitating an online collaboration, prompt feedback is important, in addition to well-timed intervention for motivation of performance ahead of potential punctuations in project work (Kienle & Ritterskamp 2007).

## **ORGANISING LEARNING RESOURCES**

Cogent and imaginative approaches to facilitation extend to the organisation of learning resources. This is especially important for distance and continuing students who are reliant on e-learning technologies, since the absence of face-to-face context puts pressure on normal human methods of comprehension in social contexts. Well-organised learning resources assist the scaffolding process in learning, and the inverse also

applies (Pea 2004). The role of the facilitator extends to incorporating recent developments in the field into the unit. Demonstration of command over the subject matter of the course can be well-served in virtual learning environments since the hyperlinked nature of the Internet is founded within this concept. The challenge is in finding a balance between giving students all the links they need, versus teaching them how to search and discriminate within the sea of information that is available (Parnell & Carraher 2005). Online students can feel especially overwhelmed if set loose in too much information about an assigned task. On the other hand, to be too directed may lead to over reliance on the teacher as a provider of information rather than a facilitator of learning experiences.

## **FACILITATING THE TRANSFORMATION**

Applying our observations of punctuated equilibrium in e-collaboration projects amongst Management students and correlating the literature in the field, we are able to recommend:

1. Greater awareness amongst Management education course designers of the punctuated equilibrium model of team work
2. More balance between constructing versus designing learning experiences in relation to virtual team work
3. Pursuit of professional development opportunities for educators who need to improve their facilitation skills with e-learning technologies and the pedagogical mind shift this requires.

## **THE HEART OF THE MATTER**

Increasingly, evidence points to the fact that teamwork, virtual or otherwise, has joined the ranks of reading and writing as an essential skill for success in the modern workplace. With the extra layer of complexity inherent in online learning, it becomes clear that educators must understand the nature of leadership through facilitation and become facilitators when such a role is educationally optimal. We have identified a significant transformation in the learning style between generations of students and offered a definition and model of effective facilitation to assist these students in responding to the effects of punctuated equilibrium. We have described a feedback tool that has proven to be effective as a team motivator which reverses this cycle. We encourage online providers to transform the provision of their courses in the light of our findings and to expand this line of thought through articulation of their practical and theoretical insights as we all work to investigate and further improve the online learning environment.

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