

Researching Social Conflict in Collaborative Groups

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ABSTRACT

There is a substantial body of literature examining conflict in social settings (Bartos & Wehr, 2002; Isenhardt & Spangle, 2000; Coser, 1956) but considerably less understanding of social conflict in settings which are mediated by communications and information technologies (Hobman, Bordia, Irmer & Chang 2002; Graham, 2002). Understandings of collaborative environments have been acquired largely through the use of archived course transcripts. This strategy, while important in furthering our knowledge of computer mediated settings and collaboration in general, provides one understanding of learners' online worlds. Methodologically, it has privileged observable behaviors over informal, and 'back-stage' (Goffman, 1969) or private social behaviors and processes (Jones & Cawood, 1998). This may be problematic when researchers wish to study phenomena such as private conflicts. This paper discusses one perspective for the study of covert conflict processes. It is argued that such an approach holds promise in obtaining more complete understandings of the meanings and dynamics of conflict in instructional groups in technology mediated settings. .

Keywords

Methodological issues, disputing, group work, conflict

INTRODUCTION

Group Work

There has been a growing awareness of the importance of group work both in educational (Sondak, 2002; Graham, 2002; Bowen, 1998) and work place settings (Bacon, Stewart & Silver, 1999). Groups are "small collectives of individuals that interact for the purpose of accomplishing one or more shared goals while operating with some degree of interdependence" (Devine & Philips, 2001: 511). Hurst & Thomas (2004) define networked learning groups as "task-driven individuals who behave as a temporary team, but who may be separated by geographic or temporal space and use network based communication tools to bridge these spaces." (206).

Management schools have been at the vanguard in deploying instructional strategies which emphasize group-based learning (Sondak, 2002; Chen, Donahue, & Klimoski, 2004). There is substantial empirical evidence that collaborating with peers develops important group and process skills; encourages collaborative knowledge sharing and higher learning practices (Urch Druskat & Kayes, 2000; Bacon et al., 1999; Johnson & Johnson, 2004). However not all groups experience success undertaking collective assignment, nor are collaborations always problem-free (Chen et al., 2004). Group work may be problematic for some learners (Greeno, 1997); unpopular with others (Chen et al., 2004; Oliver & Omari, 2001; Foley & Schuck, 2002). "Group assignments suck!" has been articulated on at one occasion by a disgruntled learner (Foley, & Schuck, 2002: 131). Other researchers have observed that group experiences may be more 'dismal' than 'instructive' (Bowen, 1998: 95). Urch Druskat, & Kayes (2000) believe that: "participation in student project teams often creates more frustration and dislike of teamwork than appreciation for the diversity of perspectives and improved learning and performance that it makes possible" (346).

Educators have attempted to identify probable causes in the hope of improving group learning experiences and attitudes towards group work in general (Bacon et al., 1999; Hare & O'Neill, 2000; O'Donnell, & O'Kelly 1994). It is clear that learners require additional skills to work effectively in groups, particularly when the focus is on experiential and constructivist learning outcomes (Tan, 2004). Group dynamics and group process skills have been targeted as being particularly relevant. For example, educators have identified communication, collaborative problem solving and conflict resolution as core skills required by learners to successfully manage both process and relationship dynamics of group work (Chen et al., 2004).

Many eLearning and online learning scholars have documented the benefits of social constructivist learning and the high levels of interaction made possible when individuals work in groups in technology mediated settings.

However there is growing evidence that web-based settings present greater challenges for remote groups undertaking collaborative group work (Berry, 2002). According to Davis & Holt: “the reality is that groups are difficult and complex in F2F, and they can be more so in virtual space” (1998: 326). It is therefore disconcerting to see discussions of groups and group work as unproblematic, harmonious and problem free (Hodgson & Reynolds, 2005; Reeves, Herrington & Oliver, 2004). Increasingly scholars are questioning these assumptions. Gibson & Cohen (2002) for example allude to a dark side to geographically dispersed group work. Conflict is cited a key challenge.

SOCIAL CONFLICT

Introduction

Conflict is a complex social phenomenon which has been intensively researched over the past thirty years (Burton, 1990). Despite the apparent maturity of the concept, it nevertheless remains fragmented and not well understood (Rubin, Pruitt, & Kim, 1994; Canary, Cupach & Messman, 1995). Numerous definitions of conflict exist, subsequently researchers have recognized that the concept is not readily amenable to any single, simple definition (Isenhardt & Spangle, 2000; Porter & Lilly, 1996). Yet there is some consensus that issues of interdependence, disagreement and interference are key indicators of conflict prone situations (Barki & Hartwick, 2001). Conflict is defined as “...an interpretive behavior that involves the perceived incompatibilities between parties of the views, wishes, and the desires that each holds” (Ayoko, Härtel, & Callan, 2002: 168).

Conflicts are believed to result when group members come together to perform tasks; from the tasks themselves; and from interpersonal interactions (Hollingshead, Wittenbaum, Paulus, Hirokawa, Ancona, Peterson, Jehn & Yoon, 2005). Most group and conflict theorists believe conflict is an inevitable by-product of group interaction (Poole, Holmes & Desantis, 1991; Pendell, 1990). Therefore considerable attention has been directed at the types of conflict likely to occur when groups undertake collaborative group work (Porter & Lilly, 1996; Jehn, 1994; Montoya-Weiss, Massey & Song, 2001) and more recently, solidified into a theoretical framework proposed by Jehn, (2000; 1994). Specific conflicts that surface in groups include: task, process and relationship (Jehn & Mannix, 2001).

Task conflict is concerned with a group’s perception of problems in carrying out the tasks needed to complete a project; interpersonal or relationship conflict occur when problems take on a personal nature; process conflict occurs when the group cannot agree on how to proceed with tasks (Jehn & Mannix, 2001). Interpersonal conflict is typically viewed as the more destructive in impairing the function of groups, whereas task and process are believed to be less deleterious and may be beneficial to building connections between group members.

Conflict Dynamics

Early group research has suggested that some conflict may be beneficial to groups and group functioning (Coser, 1968). One well known group development model identifies conflict as an important and necessary stage in the development of a group (Tuckman, 1965; Tuckman & Jensen, 1977). The conflict stage, or ‘storming’, is the second of 4 stages that a group progresses through. Conflict begins early in the formation of a group and is resolved as the group moves to the next, more socially advanced stage. Hostility, disunity and emotional turmoil are typical outcomes of the storming stage. Newer group development theories treat conflict stage theories in a less linear and more dynamic and cyclical terms (Gersick, 1988; Carabajal, LaPointe & Gunawardena, 2003), however understandings of conflict as a bounded, one-time event, permeates the group literature (Jehn & Mannix, 2001).

Alternatively, other models of conflict take the stance that conflict is a social process which unfolds over time (DeChurch & Marks, 2001). In the early stage of a conflict, disputes are characterized as being latent or hidden. In the latent phase, conflicts “have yet to express themselves in an observable manner” (Sandole, 2003: 39). Next is the ‘manifest conflict’ phase; here the dispute has transitioned from hidden to ‘expressed’ or ‘overt’ displays of contention. This is typically the juncture where conflict theorists and researchers acknowledge that social conflict is occurring. Finally, there is a closure phase where either the problem is resolved or disputes retreat once again to the latency phase to begin another cycle (Burton, 1990: 2; Bartos & Wehr, 2002).

RESEARCHING CONFLICT

Current Limitations

Despite acknowledgement of a covert phase in conflict, by far, a majority of studies concentrate on overt expressions of conflict. In fact, theories of individual conflict styles and group conflict management are predicated on behaviors being both visible and observable, presumably to disputants but also to researchers (c.f.

Kuhn & Poole, 2000). For example, Burton (1990 a) defines conflict as an ‘overt happening’ that has ‘underlying social conditions’. Overt manifestations of conflict also feature prominently in accounts of problematic behaviors in web based settings. For example, the phenomena of Flaming with its incendiary attributes of hostility, criticism and swearing, has generated a great deal of empirical interest (Lea, O’Shea, Fung, & Spears, 1992). Flaming is defined as ‘aggressive or hostile’ interactions in the form of text based messages (O’Sullivan & Flannagin, 2003: 70). Similar behaviors in face-to-face settings are classified by conflict theorists as conflict escalation behaviors with roots anchored in frustration and perceived grievances amongst parties (Bartos & Wehr, 2003). Although Flaming is thought to be rare in instructional online settings (Orlikowski & Yates, 1993), anecdotal Flaming incidents have been reported in several online collaborative group projects (c.f. Robertshaw, 2000; McLoughlin & Luca, 2001).

A recent review of Flaming literature by O’Sullivan & Flannagin (2003) suggests that our understanding of problematic behaviors in technology mediated settings is limited particularly when the focus is on overt social interactions. According to O’Sullivan & Flannagin (2003) a majority of Flaming studies have relied on archived transcripts, pulled from computer mediated conferences or list servs. Transcripts are a record of group interactions and are typically text based. Relying on transcripts, coders search for obvious manifestations of the phenomena under study; in the case of Flaming, this might entail looking for strong language such as swearing or insults. As the reviewers point out, this strategy privileges the researcher’s or coder’s perspective; in most cases the intentions, meanings and understandings of the principle players: the person engaged in the Flaming behavior and the recipient of the Flaming messages, are ignored. Secondly, not only might researchers be misinterpreting Flaming messages, there is the possibility that recipients of the Flaming messages might also be misinterpreting messages and responding accordingly. Consequently by focusing solely on ‘visible’ manifestations of phenomena contained in snippets of conversations, Flaming researchers, and recipients, overlook the intentions of social actors. The opportunity to develop richer understandings of social interactions in these settings is problematic. From O’Sullivan & Flannagin’s (2003) perspective, Flaming phenomena may well be one giant misunderstanding or incidents of Flaming may be considerably greater than previously thought.

Educators also use archived transcripts to study online and networked learning environments. These transcripts consist of archived discussions and interactions by learners. Course transcripts have enabled researchers to examine interactions among learners at a level of detail unavailable in face to face settings (Taylor et al., 2000). Mason (1992) argues that transcripts offer greater opportunity for new and significant insights into learners’ online worlds.

There is the underlying assumption that transcripts represent a reasonable facsimile of learner engagements in technology mediated settings (Jones & Cawood, 1998). Group work is dynamic and multifaceted and not always easy to capture in technology mediated environments (Starr & Strauss, 1999). Current collaborative technologies are not capable of tracking and tracing all forms of user engagements. Although not directly related to the field of online learning, work in computer supported collaborative work provides additional insights into the limitations of software programs. Instrumental notions of group work as formal, organizationally specified, and visible (archived by computer software) are giving way to new understandings which recognize that group collaborations may also be ‘invisible’, behind the scenes and more resistant to surveillance. Software designers have been aware of this phenomenon for sometime and admit they may not be up to the challenge in capturing and archiving ‘invisible’ group processes (Starr & Strauss, 1999).

In addition to technical and methodological challenges in research group conflicts, social research traditions present another impediment worth noting. In an ethnographic study exploring the dynamics and communication practices of teams, Ellingston (2003) found important qualitative and quantitative differences in the way groups function. Ellingston (2003) demonstrated that informal group interactions were substantially more relevant than previously thought. Informal group interactions consisted of group collaborations and discussions which took place outside of formal meeting spaces. Ellingston (2003) argues that traditional group research has consistently favoured settings which are physically and spatially ‘bounded’, and which generate ‘convenient chunks of communication’ (95), such as laboratories or meeting rooms, where group interactions are more easily studied, captured and analyzed. Whereas informal, behind the scenes engagements, have been overlooked and considered inconsequential. Ellingston believes formal contained settings are a better fit with researchers’ notions of what a particular social context should look like.

Similar inferences might be made to online/networked settings, where off-line learner interactions are more ephemeral and less easily contained (Beuschel, 2003). There has been an over emphasis on formal, bounded settings of online forums, and an under-emphasis on group interactions which occur outside of these formal settings. More subtle and theoretically important concepts are overlooked or under examined (Sanders, 2002).

Herbert Blumer believed that all human actions contain covert and overt processes. A more complete understanding human action is not feasible unless both forms of expression are considered (Athens, 1993). Drawing on the metaphor of a theatre, Goffman (1969) posits that social actors engage in two performance spaces: a 'front-stage' and an adjacent back region or 'back-stage'. It is the 'back-stage' where social actors find sanctuary, renew social bonds; safe in the knowledge they are out of view from the prying eyes of the audience. According to Perrolle (1995) back-stage activities occur despite organizational efforts to track work group interactions through collaborative software programs.

A Disputing Perspective to Study Conflict

A disputing perspective focuses on an overlooked and under researched social phenomena in collaborative groups: covert or private conflicts. As Kolb & Putnam (1992) explain: "To take a dispute (s) as the unit of analysis is to focus on the behavior of various parties to a conflict as it unfolds over time and to look at the interaction of a conflict and the procedures by which it is processed as the essential ways that issues are made meaningful and resolved (11)". As a theoretical perspective, disputing focuses on the meaning and interpretations of social actors in the development and management of disputes. A disputing perspective is less concerned with sources of conflict or types of conflict; instead, how conflict is expressed; conflict behaviors and actions and the ways in which disputes are managed are the primary interest.

A disputing perspective is a useful framework to investigate conflicts in online/networked learning environments. Firstly, our knowledge of how learners manage conflict in online/networked settings is limited (Carabajal et al., 2002; Graham, 2002). According to Paul et al., (2004) "the way conflict is handled contributes greatly to the group's success" and "...one can argue that it is the way conflict is handled, rather than conflict itself, that is of crucial importance for work groups" (306).

A disputing approach is more inclusive than conventional approaches since it emphasizes both private and public forms of contention. Private expressions of conflict encompass a broader range of behaviors than those found in existing conflict management practices. Private conflict behaviors deviate from the better known styles of conflict management which include: avoidance, competing, accommodating and compromising (Isenhardt & Spangle, 2000; Barki & Hartwick, 2001). Despite their strong foothold in the conflict literature, Cai & Fink (2002) argue that current conflict styles are assumed and not empirically tested. Their research supports the existence of other conflict styles. Disputing styles in contrast have a distinct theme of conflict avoidance. Disputing behaviors may consist of ignoring the other party or person, the use of silence, tolerance, hurt, expressions of displeasure, venting and gossip (Bartunek, Kolb & Lewicki, 1992). A disputing perspective does not rule out conventional conflict management tactics by individuals and groups; it ensures a more comprehensive approach to the study of group conflict dynamics.

There are indicators that learners may be engaging in private disputing practices in managing conflicts. Silence, a covert disputing strategy, has been found to be particularly problematic for group collaborations in online settings (c.f. Zaferiou, 2003; Davis & Holt, 1998). Silence is defined as an absence of communication (Websters, 1988). It differs from an absence of online learner participation discussed by online researchers. Although, as Friedman, Currall & Tsai (2000) observe: "Clearly, someone who does not participate is likely to initiate conflict only through the disruption effect of his or her absence" (402). Instead, silence occurs when task or process related communications within a group is not responded to by a member of the work group. In an in-depth and methodologically rigorous study of 13 geographical dispersed groups of learners, Cramton (2001) identified silence as having the most disruptive impact on collaborative group processes. Gibson & Cohen (2002) cannily observe that in the context of groups working on collaborative tasks in technology mediated settings, what is not said... is as important as what is said... since non-responses often lead to misinterpretations and erroneous assumptions being made. Clearly, conventional approaches to the study of conflict—in particular the reliance on transcript analysis methods, would overlook such seemingly innocuous but potentially highly conflict prone behaviors.

Research also suggests that online learners may be deploying covert or back-stage (Goffman, 1969) practices as a way of managing conflicts. Ethnographic research has demonstrated that learners in collaborative work groups will purposely construct an 'illusion of harmony' despite the disharmony present (Kates, 2000: n.p.). In online settings, learners have been known to keep frustrations to themselves (Zafeiriou, 2003; Hara & Kling, 1997). This suggests that when conflict is tacitly discouraged within social settings and if its absence is interpreted as a successful group collaboration, which in the Group and Organizational literature has been shown to be the case (Millward & Kyriakidou, 2004; Luca & Tarricone, 2002), disagreements are more likely to become private and covert (Barki & Hartwick, 2001). Kolb & Bartunek (1992) further explain: "In contexts where harmony and collaboration are prized, public expressions of conflict can be seen as antisocial and as detrimental to getting on with the work... what happens is that disputes go underground (66)." A disputing provides a comprehensive way

of understandings and researching problematic situations in online and networked settings. It remains sensitive to diverse and varied patterns of interaction and group dynamics in social settings.

CONCLUSION

How to best prepare learners for success in online collaborative settings is complex. With the growing use of group strategies in online and networked settings (Montoya-Weiss et al., 2001), it is becoming increasingly important to understand challenges learners may be facing undertaking group assignments (McConnell, 2005; Zafeiriou, 2002; Cramton, 2001; Graham, 2002). The emphasis placed on observable phenomena is social science research means that current understanding of social conflict in collaborative group settings has remained narrowly defined and limited to 'dramatic renderings' (Van Maanen, 1992) which are easily captured. Various scholars have pointed out the limitations of objective approaches, citing difficulties in separating meaning and personal interpretations in conflict dynamics (O'Sullivan & Flanagan, 2003; Van Maanen, 1992). Nevertheless, positivist approaches dominate conflict research and group process research.

According to Burton (1990), social conflict will continue to pervade our lives. It is an outcome of increased social, family and professional pressures. As he explains: "...increased demands made on persons as a result of technological and social change; ... to master a computer...to obtain a technical or professional training, and the greater output in time and energy required to attain these goals... conflict itself is arguably one of the most important variables of all, associated with these increased pressures and expectations" (59). Conflict scholars have suggested that greater understandings of collaboration may not be possible until its polar opposite, contention, is better understood (Sandole, 2003; Bartos & Wehr, 2002). Disputing provides one path towards greater understandings of conflict dynamics and how to manage these dynamics (Bartunek et al., 1992).

REFERENCES

- Ayoko, O. B., Härtel, C. E. J., & Callan, V. J. (2002). Resolving the puzzle of productive and destructive conflict in culturally heterogeneous workgroups: a communication accommodation theory approach. *International Journal of Conflict Management*, 13(2), 165-196.
- Bacon, D., R., Stewart, K., A., & Silver, W., S. (1999). Lessons from the best and worst student team experiences: How a teacher can make the difference. *Journal of Management Education*, 23(5), 467-488.
- Barki, H., & Hartwick, J. (2001). Interpersonal conflict and its management in information system development. *MIS Quarterly*, 25(2), 195 - 229.
- Bartos, O., J. & Wehr, Paul. (2002). *Using Conflict Theory*. Cambridge: Cambridge University Press.
- Bartunek., J. M., Kolb, D. M., & Lewicki, R. J. (1992). Bring conflict out from behind the scenes: private, informal, and nonrational dimensions of conflict in organizations. In D. M. Kolb. & J. M. Bartunek. (Eds.), *Hidden Conflict in Organizations* (pp. 209-228). London: Sage Publications.
- Berry, R. W. (2002). The efficacy of electronic communication in the business school: marketing students' perceptions of virtual teams. *Marketing Education Review*, 12(2), 73-79.
- Beuschel, W. (2003). From face-to-face to virtual space. In B. Wasson. & S. Ludvigsen. & U. Hoppe. (Eds.), *Designing for Change* (pp. 229-238). Dordrecht, Netherlands: Kluwer Academic Publisher.
- Bowen, D. D. (1998). Team frames: the multiple realities of the team. *Journal of Management Education*, 22(1), 95-103.
- Burton, J. (1990). *The environment of conflict*. New York: Saint Martins Press.
- Cai, D. A., & Fink, E. L. (2002). Conflict style differences between individualists and collectivists. *Communication Monographs*, 69(1), 67-87.
- Canary, D. J., Cupach, W. R., & Messman, S. J. (1995). *Relationship Conflict*. London: Sage Publications.
- Carabajal, K., LaPointe, D., & Gunawardena, C. N. (2003). Group development in online learning communities. In M. Moore. & W. Anderson. (Eds.), *Handbook of Distance Education* (pp. 217-234). Nahwah, NJ: Erlbaum Associates, Inc.

- Chen, G., Donahue, L. M., & Klimoski, R. J. (2004). Training undergraduates to work in organizational teams. *Academy of Management Learning & Education*, 3(1), 27-40.
- Coser, L., A. (1968). *The Functions of Social Conflict*. New York: Free Press.
- Cramton, C. D. (2001). The mutual knowledge problem and its consequences in geographically dispersed teams. *Organization Science*, 12, 346-371.
- Davis, M., & Holt, M. E. (1998). havingproblems@cm.com: new ways to miss the point. *Innovative Higher Education*, 22(4), 311 - 327.
- DeChurch, L. A., & Marks, M. A. (2001). Maximizing the benefits of task conflict: The role of conflict management. *The International Journal of Conflict Management*, 12(1), 4-33.
- Devine, D., J. & Phillips, Jennifer, L. (2001). Do smarter teams do better: a meta-analysis of cognitive ability and team performance. *Small Group Research*, 32(5), 507-532.
- Ellingson, L. L. (2003). Interdisciplinary Health Care Teamwork in the Clinic Backstage. *Journal of Applied Communication Research*, 31(2), 93-117.
- Friedman, R. A., Currall, S. C., & Tsai, J. C. (2000). What goes around comes around: The impact of personal conflict style on work conflict and stress. *The International Journal of Conflict Management*, 2000(11), 32-55.
- Foley, G., & Schuck, S. (2002). Web-based conferencing: Pedagogical asset or constraint? *Australian Journal of Educational Technology*, 14(2), 122-140.
- Gibson, C. B., & Cohen, S. G. (2002). The last word. In B. G. Christine & G. C. Susan (Eds.), *Creating Conditions for Effective Virtual Teams* (pp. 403-421). San Francisco: Jossey-Bass.
- Greeno, J., G. (1997). Response: on claims that answer the wrong questions. *Educational Researcher*, 26(1), 5-17.
- Goffman, E. (1969). *The Presentation of Self in Everyday Life*. London: Allen Lane.
- Graham, C. R. (2002). *Understanding and facilitating computer-mediated teamwork: A study of how norms develop in online learning teams*. Indiana University, Indiana.
- Hara, N., & Kling, R. (2000). Students' distress with a web-based distance education course: an ethnographic study of participants' experiences. *Information, Communication & Society*, 3(4), 557-579.
- Hare, L. R., & O'Neill, K. (2000). Effectiveness and Efficiency in Small Academic Peer Groups: A Case Study. *Small Group Research*, 31, 24-53.
- Hobman, E. V., Bordia, P., Irmer, B., & Chang, A. (2002). The expression of conflict in computer-mediated and face-to-face groups. *Small Group Research*, 33(4), 439-465.
- Hodgson, V. E., & Reynolds, M. R. (2005). Consensus, difference and 'multiple communities' in networked learning. *Studies in Higher Education*, 30(1), 11-24.
- Hollingshead, A. B., Wittenbaum, G. M., Paulus, P. B., Hirokawa, R. Y., Ancona, D. G., Peterson, R. S., Jehn, K. A., & Yoon, K. (2005). A look at groups from the functional perspective. In M. S. Poole. & A. B. Hollingshead. (Eds.), *Theories of Small Groups: Interdisciplinary Perspectives* (pp. 21-62). London: Sage Publications.
- Hurst, D. C., & Thomas, J. (2004). *Developing team skills and accomplishing team projects*. Athabasca University. Retrieved June 8th, 2005, from the World Wide Web: http://cde.athabascau.ca/online_book/ch8.html
- Isenhardt, M. W., & Spangle, M. (2000). *Collaborative Approaches to Resolving Conflict*. Thousand Oaks, Calif.: Sage Publications.
- Jehn, K. A. (1994). Enhancing effectiveness: An investigation of advantages and disadvantages of value-based intragroup conflict. *International Journal of Conflict Management*, 5, 223-238.

- Jehn, K. A., & Chatman, J. A. (2000). The influence of proportional and perceptual conflict composition on team performance. *International Journal of Conflict Management*, 2002, Vol. 13 Issue 2, p165, 31p., 11(1), 56-74.
- Jones, C., & Cawood, J. (1998). The Unreliable Transcript, Contingent Technology and Informal Practice in Asynchronous Learning Networks. In S. Banks. & C. Graebner. & D. McConnell. (Eds.), *Networked Lifelong Learning: Innovative Approaches to Education and Training through the Internet* (pp. 9-14). Sheffield: Sheffield University.
- Jehn, K. A., & Mannix, E. A. (2001). The dynamic nature of conflict: a longitudinal study of intragroup conflict and group performance. *Academy of Management Journal*, 44(2), 238-252.
- Kates, S., M. (2000, September 9, 04). *Exploring deep approaches to group learning in marketing classes [online]*. Paper presented at the ANZMAC 2000 Visionary Marketing for the 21st Century: Facing the Challenge, Gold Coast, Queensland.
- Kolb, D. M., & Bartunek, J. M. (1992). Hidden conflict in organizations: uncovering behind-the-scenes disputes Review. *Canadian Journal of Communication*, 19(1), 114.
- Kolb, D. M., & Putnam, L. (1992). Introduction: the dialectics of disputing. In D. M. Kolb. & L. L. Putnam. (Eds.), *Hidden Conflict in Organizations: Uncovering Behind-the-Scenes Disputes* (pp. 1-31). London: Sage Publications.
- Kuhn, T., & Poole, M. S. (2000). Do conflict management styles affect group decision making? Evidence from a longitudinal field study. *Human Communication Research*, 26(4), 558-557.
- Luca, J., & Tarricone, P. (2002). *Does emotional intelligence affect successful teamwork?* Paper presented at the In 'Meeting at the crossroads : proceedings of the 18th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education (ASCILITE), Melbourne.
- Lea, M., O'Shea, T., Fung, P., & Spears, R. (1992). "Flaming" in computer-mediated communication: observations, explanations, implications. In M. Lea. (Ed.), *Contexts of Computer Mediated Communication* (pp. 89-112). New York: Harvester Wheatsheaf.
- Mason, R. (1992). Evaluation methodologies for computer conferencing applications. In A. R. Kaye (Ed.), *Collaborative Learning Through Computer Conferencing* (pp. 105-116). Berlin: Springer-Verlag.
- McLoughlin, C., & Luca, J. (2001). Houston, we have a problem. In D. Murphy & R. Walker & G. Webb (Eds.), *Case Studies of Teaching in Higher Education* (pp. 44-52). London: Kogan Page.
- McConnell, D. (2005). Examining the dynamics of networked e-learning groups and communities. A special issue of Studies in Higher Education. In V. Hodgson. & L. Perriton. & M. Reynolds. (Eds.), *Learning Communities and Networked Learning: Theory, Practice and Critique* (Vol. 30, pp. 25-42). London: Carfax Publishing.
- Millwaid, L. J., & Kyriakidou, O. (2004). Effective virtual teamwork: a socio-cognitive and motivational model. In S. H. Godar. & S. P. Ferris. (Eds.), *Virtual and Collaborative Teams: Process, Technologies and Practice* (pp. 20-34). London: Idea Group Publishing.
- Montoya-Weiss, M., Massey, A. P., & Song, M. (2001). Getting it together: temporal coordination and conflict management in global virtual teams. *Academy of Management Journal*, 44(6), 1251-1262.
- Mortensen, M., & Hinds, P. J. (2001). Conflict and shared identify in geographically distributed teams. *International Journal of Conflict Management*, 12(3), 212-245.
- O'Donnell, A. M., & O'Kelly, J. (1994). Learning from peers: Beyond the rhetoric of positive results. *Educational Psychology Review*, 6, 321-349.
- Orlikowski, W. J., & Yates, J.A. (1993). *Knee-jerk Anti-LOOPism and other E-mail Phenomena: Oral, Written, and Electronic Patterns in Computer-Mediated Communication* (Working Paper #3578-93). Cambridge: MIT Sloan School.
- O' Sullivan, P. B., & Flanagan, A. J. (2003). Reconceptualizing 'flaming' and other problematic messages. *New Media and Society*, 5(1), 69-94.

- Oliver, R., & Omari, A. (2001). Student response to coollaborating and learning in a web-based environment. *Journal of Computer Assisted Learning*, 17(1), 34-47.
- Paul, S., Priya, S., Imad, S., & Mykytyna, P. P. (2004). Impact of heterogeneity and collaborative conflict management style on the performance of synchronous global virtual teams. *Information & Management*, 41, 303-321.
- Pendell, S. D. (1990). Deviance and Conflict in Small Group Decision Making: An Exploratory Study. *Small Group Research*, 21(3), 393-403.
- Perrolle, J., A. (1995). Privacy and surveillance in computer supported cooperative work. In D. Lyon & E. Zureik (Eds.), *New Technology, Surveillance and Social Control* (pp. 21-76). Mineapolis: University of Minnesota Press.
- Poole, M. S., Holmes, M., & DeSanctis, G. (1991). Conflict management in a computer-supported meeting environment. *Management Science*, 37(8), 926-953.
- Porter, T. W., & Lilly, B. S. (1996). The effects of conflict, trust, and task commitment on project team performance. *The International Journal of Conflict Management*, 7(4), 361-377.
- Reeves, T. C., Herrington, J., & Oliver, R. (2004). A development research agenda for online collaborative settings. *Educational Technology*, 52(4), 53-65.
- Robertshaw, M. (2001). Flamewar. In R. W. David Murphy, & Graham Webb. (Ed.), *Online Learning and Teaching with Technology* (pp. 13-20). London: Kogan Page.
- Rubin, J. Z., Pruitt, D. G., & Kim, S. H. (1994). *Social Conflict. Escalation, Stalemate, and Settlement* (2nd ed.). New York: McGraw-Hill, Inc.
- Sanders, D. (2002). Behaviouralism. In D. Marsh. & G. Stoker. (Eds.), *Theory and Methods in Political Science* (2nd ed., pp. 45-64). New York: Palgrave MacMillan.
- Sandole, D. J. D. (2003). Typology. In S. Cheldelin. & D. Durckman. & L. Fast. (Eds.), *Conflict: From Analysis to Intervention*. London: Continuum.
- Sondak, H. (2002). Making sense of the phenomenology of groups and group membership. In H. Sondak (Ed.), *Towards Phenomenography of Groups and Group Membership* (pp. 236 -243).
- Star, S. L., & Strauss, A. (1999). Layers of silence, arenas of voice: The ecology of visible and invisible work. *Computer Supported Cooperative Work*, 8, 9-30.
- Tan, O. S. (2004). Students' experiences in problem-based learning: three blind mice episode or educational innovation? *Innovations in Education and Teaching International*, 41(2), 169-184.
- Tuckman, B. W. (1965). Developmental sequence in small groups. *Psychological Bulletin*, 63(6), 384-300.
- Tuckman, B. W., & Jensen, M. A. C. (1977). Stages in small group development revisited. *Group and Organizational Studies*, 2, 419-427.
- Urch Druskat, V., & Kayes, C. D. (2000). Learning Versus Performance in Short-Term Project Teams. *Small Group Research*, 31, 328-353.
- Van Maanen, J. (2002). Drinking our troubles away: Managing conflict in a British Police Agency. In D. M. Kolb. & J. M. Bartunek. (Eds.), *Hidden Conflict in Organizations* (pp. 33-62). London: Sage Publications.
- Zafeiriou, G. (2003). Managing conflict and reaching consensus in text-based computer conferencing: the students' perspective. *Education for Information*, 21(2/3), 97-111.
- Zornona, A., Ripoll, P., & Peiro, J. M. (2002). Conflict management in groups that work in two different communication contexts: face-to-face and computer-mediated communication. *Small Group Research*, 33(5), 481-508.