Employing Collaborative Learning Strategies in Online Conflict Resolution

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Abstract—Although some critics may argue that conflict resolution cannot be carried out appropriately by virtual education, the basic elements of conflict present themselves within distance education courses, which can provide rich environments to practice mediation and resolution. New communication technologies and Internet tools make training persons from all over the world possible, thus permitting conflict resolution tools to cascade within different pluralistic organizations or groups of persons from different backgrounds that must interact in order to achieve a common goal. Conflict resolution, in short, adds to the positive socio-emotional atmosphere of an organization and leads to greater trust, a vital component in any organization. The innovative use of technology and Internet tools provides a new medium for conflict resolution that represents an interesting and important area of research.

The methodology we propose permits participants to not only coexist within a distance education course, but to actually overcome barriers to cooperation, including interpersonal, cultural, ethnic, religious, and organizational differences, to name a few. Conflict is a natural phenomenon that occurs as a consequence of human interaction. The goal of our research is to provide a space for individuals to master the skills necessary to minimize the negative consequences that can result when the sources of conflicts are not quickly identified, confronted and resolved in a fair and amicable atmosphere of mutual caring and respect.

Index Terms—Mediation, Conflict Resolution, Conciliation, Arbitration, Consensus, Tutoring, Counselling,

I. INTRODUCTION

The process of globalization, along with ease of travel and communication technologies, including the Internet and its tools, has substantially increased the amount and characteristics of actual interaction. Consequently, there is an increasing need to recognize the sources of conflict, as well as how to apply appropriate mediation resolution techniques to help individuals and organizations interact more efficiently towards their common goals [3]. Conflicts were once primarily based on interaction between homologues of the same background and culture. However, due to the increased ease of transportation and accessibility of technology, including online courses, the need to respond to differences due to language, culture, work goals, and institutional organization, make the area of conflict resolution an area of growing exigency.

Organizations interact in a world market that demands increased awareness of the correct actions to take and how to mediate when actions do no meet expectations. Taking correct actions and responding to conflict can contribute to a more trusting atmosphere, which has been positively correlated to increased cooperation, extra-role contributions, enhanced teamwork, and more effective leadership [16].

The integration of people from different countries, scopes of work, social and cultural realities, along with different accumulated experiences, requires persons interact with cultural intelligence, which is defined as "a person's capability to adapt effectively to new cultural contexts" [10, p. 59]. Adapting to cultural contexts refers not only to the interaction between different cultures, but "to successfully adapt to different national, organizational and professional cultures." (Centre for Leadership and Cultural Intelligence) (http://www.cci.ntu.edu.sg/) [7].

Furthermore, this same Centre cites an "International Labour Organization" as having published that "70% of business ventures fail due to cultural differences." Consequently, we ask if conflict resolution techniques can significantly contribute to greater success in a business or educational setting. In this case, we refer to a distance learning course comprised of people from different cultures and organizational subcultures who must work together within a virtual space that promotes live interaction and real-time collaborative learning [12].

Invariably, the very nature of communication and interaction among people creates spaces for conflict. Conflict, however, if properly mediated, can also create positive spaces for mediation and conflict resolution, which can help promote an atmosphere that is more conducive, in this case, to collaborative learning.

II. DEVELOPMENT

There has been a virtual explosion of interest in how to resolve personal, organizational and other types of conflict on the Internet [21]. Teaching concrete behaviours and actual skills, however, requires a set of conditions that are difficult to produce on the Internet. Where individuals can obtain the skills needed to better deal with conflict is of utmost importance.

Conflict resolution is imperative because businesses, school systems, government agencies, and workplaces represent potential spaces for conflict which, at the very least, can affect organizational cohesiveness and, at worst,

can include Equal Employment Opportunity complaints, sexual harassment suits, abusive treatment litigation and contractual disputes. Overcoming conflict requires developing different strategies in the field of mediation skills, effective negotiation, facilitation, and interpersonal and cultural intelligence with regards organizational interaction and management. Conflict avoidance and resolution through virtual training requires extensive experience working with large groups, interpersonal disputes and complex issues. Cases of interpersonal disputes collected over the past few years by the Open University of Catalonia (UOC) reveal that power strategies of social control are generally counterproductive in managing conflicts that result from differing values, goals, interests and cultural norms that are introduced into the organization by members of the community.

Parallel to real life, strategies and methods that bring a sense of humanity and work to reconcile divergent interests (e.g. mediation and factfinding) and adjudicate rights (e.g. factfinding and arbitration) appear to mange issue-based conflict more effectively [20].

In 1998, the UOC recognized the need to train professionals in the area of conflict resolution. The UOC only offers virtual learning as its mandate is to exclusively offer distance education. Consequently, it was a great challenge to include such a complex and multifaceted area of study as part of a distance learning program.

The demand for training in conflict resolution has consistently grown since the UOC distance conflict program opened in 2006; the OC enrolled 135 new students in its distance education programs in conflictology, representing a 30% increase over the previous year. Currently, there are 5 programs offering a total of 36 credits:

1. Introduction to conflictology
2. Masters degree in conflictology
3. Postgraduate program in solving and managing conflicts
4. Violent conflicts and crisis management
5. Interpersonal, collective and social conflicts

These programs offer:

- Masters Degree: Duration 2 years with 18 learning modules
- Graduate Diploma: Duration 1 year with 4 learning modules
- Specialization Certificate: Duration 6 months with 4 learning modules
- Actualization Certificate: Duration 4 months with 1 learning module

The Graduate Diploma in managing and solving conflicts is the most popular and successful program. Currently, the Lifelong Learning Department at the UOC has 18 consultants (professors in different subjects), 1 co-ordinator (coordinating and integrating the full itinerary), 1 academic director (giving the academic coherence), 1 executive director and 1 tutor. Both students and professors come from a variety of places, backgrounds, religions, etc., and have a proven ability to work as a team in an interdisciplinary and international manner.

In all programs, a continuous assessment procedure is used. The system of continuous assessment is outlined within the program of each subject/module. The participants have to participate in different activities, including debates, group work, individual analysis, text debates, etc. These activities are guided and assessed by a specific consultant. Continuous assessment assures that the participants gain the maximum benefits from the different programs and that they reach the objectives or competencies of each module. It also provides the feedback students need to evaluate their development and improvement by monitoring their progress on a daily basis.

Although students in distance education courses are separated in space and time, students are being encouraged to act as a group by developing learning activities to promote interaction and collaboration between partners. We believe that collaborative learning within distance learning programs needs to be promoted in order to provide more varied learning opportunities for students, where students can share the same objectives and activities under sufficient direction and supervision by the course teacher/administrator.

One important consideration in developing collaborative mechanisms is based on asynchronous interaction, as students and professors can rarely interact within the same time or place. One major reason why students drop out of distance courses is because of a lack of belonging, support, and interaction with their professors and peers. We feel including asynchronous activities that require interaction of the participants may contribute to decreasing student desertion and provide a more satisfying experience.

Conflict Resolution courses are few and far between. Because of the complexity of the topic, there have been few attempts to incorporate conflict resolution into distance education courses, although there are abundant potential sources for conflict, including cultural, communicative, operational and even administrative, to name a few. Thus, including conflict resolution as course content provides both an incentive and challenge. However, there is also risk involved, as typifying and providing potential responses to different conflicts occurring in different settings often requires different strategies. In other words, there is no single strategy or action to resolve conflicts. There is only a general set of principles that can be employed to soften a situation. These principles can help close the affective distance between participants that result from conflict and provide the tools necessary to avoid or better settle differences.

Consequently, we have tried to concentrate on typifying conflict and identifying the most applicable methodologies to use in our distance education course on conflict resolution. We have also attempted to transmit the necessary concepts in an attempt to find the most suitable strategies.

Traditional educational settings, however, are also deeply affected by conflict. According to the Mexican Association of Universities and Instititions for Higher Learning [1] (ANUIES, in Spanish) student desertion from undergraduate degree programs is excessively high, especially in the areas of science and technology [1]. Specifically, in the case of the College of Telematics of the University of Colima, approximately 45% of the

students enrolled from 1996 to 2000 dropped out [8]. Consequently, as a result of high desertion rates nationally, member colleges and institutions of ANUIES [1] established a tutorial program as part of its strategic planning [6].

Within the context of the tutorial program, we have developed an online system to facilitate interaction, information access, and administrative processes [11]. Although the system has only been piloted, students report many sources of conflict and conflict appears to result in the desertion of some students. The most common sources of conflict reported by students are with family members, classmates, romantic relationships, and professors. If more widely implemented, we believe that online conflict resolution may help resolve some of the conflicts occurring in undergraduate courses. Also, we feel that more research is necessary to determine the limits and possibilities of online conflict resolution.

III. DIFFICULTIES AND RECOMMANDATIONS

Computer-Mediated Communication (CMC) can be defined as the use of information systems, particularly computers and computer networks, to "compose, store, deliver and process communication" [14], [15] between two or more persons, working in collaboration synchronously or asynchronously with common goals and objectives. Nowadays, intranets and the Internet are increasingly becoming very important communication carriers in CMC, mainly using text (electronic mail and messaging systems) and voice over IP (VoIP).

In the educational context, [9] warned that learners from different backgrounds and demographics are prone to be involved in conflicts. However, these researchers believe that CMC is an ideal medium for disentangling conflicts regarding heterogeneity, since students would speak the same technological "language," thus developing a sense of belonging, which contributes to improving group work. In addition, Dillenbourg and Schneider point out that a CMC setting could facilitate teacher control of student collaboration, especially by regulating group heterogeneity, in cases where student characteristics are too homogeneous. In addition, [13] notes that CMC, especially text messaging systems and email, may be effective for lessening potential conflicts resulting from misunderstandings among students, since in those media verbal and face-to-face feedback are absent. However, [4] showed that, for some students, the absence of face-to-face interaction that happens in CMC may contribute to losing the feeling of connection with the team. Thus, it is not easy to define whether online collaboration will effectively support student interpersonal interaction. On the other hand, Gruber mentions that CMC can be pedagogically effective if its educational activities are carefully planned, and students use it for making constructive criticism when polemic issues arise.

In order to promote more structured conflict resolution practice, the College of Telematics of the University of Colima is beginning research into the applicability of VREs (virtual reality environment) in CMC to enhance and support collaborative learning and conflict resolution. Virtual reality is defined as a computer-generated space (generally graphical, called a virtual environment) that simulates reality, which is multisensorial, highly interactive and generates mental immersion [18].

A collaborative (or multi-user) virtual reality environment (CVRE) is a shared virtual environment where people can meet and communicate via chat, using their voice and gestures, and navigate [2], [5] and [17].

VRE is based on computer-mediated communication (CMC) theories. Each person is represented in the virtual environment as an *avatar*, a graphical personification that is capable of representing the person's gestures, navigate, and carry on the voice the person. The sounds and events activated in the virtual environment are also shared.

Burdea and Coiffet [2] point out that CVRE can have a significant impact in social life and interaction, because of its degree of engagement and various ways of communication this technology offers. Past literature have researched virtual reality applications related to empathy [19] and other social collaboration issues. The potential detonators of conflict as well as how to recognize, adapt and mediate conflict represent areas in which we believe collaborative CVREs can assist students learn and practice conflict resolution techniques.

In the case of the conflict resolution distance program at the UOC, even though most of the distance education students enjoyed communicating with one another, with the professor, and with the teaching assistant, the learning assignments were not always successfully completed. Students participating in the conflict resolution distance course were asked to complete a questionnaire that revealed that:

- some students had technical difficulties which greatly hampered communication, interaction and collaboration with a distant partner.

- other students who possessed good technical knowledge of Internet tools had difficulties developing a working relationship with out-of-province or overseas partners.

- highly independent students preferred working alone and that collaborative tasks placed undue constraints on their personal work schedule.

Consequently, some recommendations to promote more fruitful online collaboration include:

- integrating collaborative tasks as an integral part of course design and offering these activities at regular intervals. As much as possible, collaborative tasks should be evaluated on equal par with individual work.

- encouraging distance learners to construct learning with peers through meaningful collaborative tasks that allow for meaningful interaction, based on constructivist learning rather than upon simple transmission of information.

- integrating work groups taking care to match personal, professional, cultural and academic backgrounds.

- collaborating via the Internet did not work well in first year courses because they attract students with diverse academic backgrounds. Research has shown that collaboration works well with a professional or graduate course where the level of homogeneity among students is much higher.

- promoting group cohesion by developing collaborative learning activities obliges interaction and collaboration between partners participating in the distance education program. Also, it is important to structure pedagogical parameters in a virtual environment in a structured and logical manner so as to present all learning materials clearly and precisely.

IV. CONCLUSION

Teaching or dealing with conflict resolution online has proven to be an advantage, as it provides different manners to negotiate and handle differences that occur as people interact. The Internet has also permitted interactions that would not always be possible if people had to be physically present. People have had to negotiate different language use and language patterns, as well as adapt to different schedules, necessities and realities, and what is better, to share them. After all, an online conflict resolution course may be the only space where a Nepalese woman can interact with a Latvian man within a collaborative problem-solving atmosphere.

Future work in the area of online conflict resolution includes areas of virtual reality technology, intelligent and expert systems, computer-supported collaborative learning, typification and comparison of the phenomenon of conflict in traditional and virtual settings and the application and efficacy of online recourses for teaching and learning conflict resolution.

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