Simulated Creative Collaboration: Experiencing Challenges to Innovative Virtual Teaming in the Classroom

Brian C. Britt
*South Dakota State University*

Kristen Hatten
*Western Michigan University*

Follow this and additional works at: https://openprairie.sdstate.edu/discoursejournal

Part of the Communication Technology and New Media Commons, Education Commons, Interpersonal and Small Group Communication Commons, Organizational Communication Commons, and the Rhetoric Commons

Recommended Citation
Available at: https://openprairie.sdstate.edu/discoursejournal/vol2/iss1/11
Simulated Creative Collaboration:
Experiencing Challenges to Innovative Virtual Teaming in the Classroom

Brian Britt, PhD
Assistant Professor
South Dakota State University
brian.britt@sdstate.edu

Kristen Hatten, PhD
Visiting Assistant Professor
Western Michigan University
Kristen.Hatten@wmich.edu

Abstract
This activity provides students with in-depth experience working as part of an innovative virtual team, which will enable them to better understand the relative advantages and disadvantages of various approaches to creative collaboration in different contexts. Participants are divided into groups, which must then solve an assigned problem using a specified communication technology and creative process from the literature. The instructor will introduce a variety of obstacles to communication using each technology, which may inhibit students’ creative processes. Following the activity, the class will discuss these challenges, participants’ responses, and the range of experiences with different collaborative processes and technologies.

Courses
Virtual Teams, Computer-Mediated Communication, Small Group Communication, Organizational Communication, Innovation and Collaboration

Objectives
- Enable students to enact a variety of creative processes in a simulated virtual team or distributed work group with realistic scenarios and constraints.
- Provide firsthand experience to help students better understand and evaluate the strengths and weaknesses of various creative collaborative approaches under different conditions.

Introduction and Rationale
New communication technologies provide a range of opportunities for collaboration well beyond face-to-face interactions with co-located, or geographically close, associates. However, the proximal and temporal distance between partners on virtual teams creates a wide array of...
additional challenges for creative collaboration efforts, which traditionally rely upon free and natural communication between parties (Sonnenburg, 2004). Firsthand experience will help students to better understand the nuances of such obstacles and be better equipped to manage them in practice.

**Description of Activity**

This activity can be conducted in as few as 30 minutes, although it may be more appropriate to allot two or more hours. This will allow time for the activity to fully develop and will permit a sufficiently long debriefing for class members to discuss their individual experiences. Each student and the instructor will use a computer with Internet access during this activity. If possible, plan to use multiple rooms.

Prior to the class period in question, the instructor should either devise a problem-solving scenario for the activity or adapt one from recent news. For instance, one might ask students to adopt the role of a consulting unit assisting the Ferguson, Missouri, police force, with the task of addressing current racial tensions in the area. It may be easier to use such a scenario pulled from a real-world news story than to construct an artificial case, especially since doing so will foster a variety of realistic solutions and promote serious problem-solving efforts.

The instructor will divide the class into several teams. Each team should be tasked with resolving the scenario using a different creative process, such as attribute listing, morphological analysis, mind mapping, brainstorming, imagery development, analogical thinking, or any number of other appropriate techniques (see, for instance, Nemiro, 2008). Each team will then be assigned a different communication technology, such as videoconferencing or whiteboard software. Free versions of many such communication tools can be found online. Finally, the instructor and each student should have access to an instant messaging (IM) account; the instructor may configure these accounts prior to the activity.

Note that, if multiple rooms are used for the activity, then the instructor should plan to remain alone in one room and to distribute individuals on the same team among different rooms. An information sheet will be distributed to each class member detailing how to access their respective IM accounts and online technologies. The instructor may choose whether or not to list the IM usernames of their fellow team members, or whether to vary this from team to team. This sheet, however, should instruct the student to remain on his or her IM account throughout the activity. For the sake of easy administration of the activity, each sheet should be enclosed an envelope labeled with the corresponding student’s name and his or her assigned room.

When beginning the activity, the instructor will introduce the scenario and the problem, then distribute the envelopes and instruct the students not to open them until they have reached their destinations.

From here, the activity will largely run itself. For an extra twist, the instructor may use his or her own IM account to distract some team members. Such distractions might include assigning additional tasks that either supplement or conflict with the primary goal of the assignment. For instance, you might demand a brief report about a certain aspect of the problem (which will require research) or ask about concerns external to the project, such as planning an outing for a visiting colleague. Alternatively, the instructor might instead play the role of a “friend” communicating with certain team members in order to distract those individuals with off-topic banter. This will further enrich the simulation of true virtual teams, as members of such teams may be distracted by other work tasks and recreational activities.
Once the allotted time for collaboration has expired, all of the students should return to the main classroom for a debriefing. This discussion should address the various technologies and creative processes used, the solutions that individuals and teams developed, and their experiences throughout the process. This discussion should also cover obstacles to virtual teaming, including the lack of physical presence and the nonverbal cues that accompany it, as well as how teams attempted to overcome those obstacles during the activity.

Connection to Concepts, Theory, and Skills

Nemiro, Beyerlein, Bradley, and Beyerlein (2008) note that creative processes are increasingly handled by teams rather than individuals, and they detail a variety of creative techniques that can be used in different situations. Most individuals have learned very few techniques to stimulate innovation, and have experienced even fewer of them first-hand, so this activity will broaden the range of students’ creative skills. Virtual teaming, however, adds several extra obstacles that may stifle some creative efforts. Proximal and temporal distance can inhibit communication, and they also make team members more prone to external distractions. This problem is particularly prevalent, since organizational members involved in virtual teams often have other obligations as well. First-hand experience as part of a virtual creative team will help students to more fully understand these challenges.

Typical Results

The authors administered this activity, basing their scenario on McDonald’s struggles to maintain restaurant operations in Iceland in late 2009. Students in a Virtual Teams class were asked to solve this problem together using Google Documents and whiteboard web pages. They were also given AOL Instant Messenger (AIM) accounts named after McDonald’s food items. Per the authors’ instructions, the five teams used drawings, idea checklists, force field analyses, brainstorming, and analogical thinking (see Nemiro, 2008) in their attempts to solve the problem.

Students were assigned to several different rooms, with no fellow teammates being co-located within the same physical space; this forced teams to use computer-mediated communication to address the task at hand. The authors also restricted some members’ communication with their fellow team members to the assigned technologies, explicitly forbidding them from using alternative in much the same way that a manager might expressly compel employees to collaborate using a specific, company-sanctioned piece of software. Some teams were given the AIM usernames of their teammates, thereby facilitating real-time conversations within the team, while others were not. One student, though, after talking with others assigned to his room, created an AIM Blast group called “McCheating” to communicate with many users at once. Information about the group spread throughout the class until almost all students were interacting through this feature. Teams were thus able to more effectively solve the problem and even collaborate with other groups. This approach resembled the ways in which organizational members can communicate outside formal channels, crossing institutionally defined boundaries to access more diverse sets of knowledge and skills (Johnson, Donohue, Atkin, & Johnson, 1994).
Appraisal

The processes explored during this activity will vary to some degree each time, as different students will inevitably develop different approaches in response to the same situation. The diverse methods that students use to try to improve their communication should be discussed during the debriefing. These varied results reflect the variety of issues that individuals in virtual teams encounter, and student recognition of this range of experiences, challenges, processes, and solutions represents one of the most important outcomes for this activity. A flexible activity of this nature necessarily leads to unpredictable results, which in turn necessitates an open-ended means of assessing the activity’s success.

The instructor may gauge student comprehension while the activity is ongoing—checking on teams’ progress and understanding may even serve as one of the “distractions” used to challenge groups. However, the debriefing discussion is a more ideal opportunity for assessment, as only at this point will students observe the variety in processes and outcomes that other teams developed. Students should be able to describe the ways that particular elements of the communicative scenario facilitated or inhibited different aspects of the collaborative process, perhaps even leading them to favor some techniques or ideas over others. Ideally, after hearing from each team, they will be equipped to synthesize their findings and consider which creative approaches worked better than others, as well as to identify other contexts in which certain approaches might be more or less suitable. The instructor should elicit such evaluations during the discussion.

If the discussion leaves any doubt about whether the activity’s desired outcomes were achieved, follow-up assessments can be used to compel students to further explore their experience. For instance, students could write a short (1–2 page) paper detailing the challenges their team faced, how they overcame those obstacles, and how their approach resembled and differed from those chosen by other teams.

References


