

RECIPROCITY, THE RASCAL OF RESOLUTION

Collaborative Problem Solving in an Online Role Play

Mary Keeffe and Lilian Austin
La Trobe University, Bendigo, Australia

Keywords: Online Role Play, Collaboration, Reciprocity, Critical Reflection, School Administration, Moodle.

Abstract: The capacity for experienced teachers to solve complex or contentious problems in the workplace is improved when the teacher or school administrator is able to see the problem from the diverse perspectives of all stakeholders and critically reflect on the decision making processes. These skills are particularly important for special education teachers and administrators who must collaborate with parents, specialists, therapists and colleagues to understand and address the educational needs of students with disabilities. This paper applies an online, role play methodology to describe a model for reciprocity, collaborative problem solving and critical reflection in contentious educational contexts. The role play involves ten roles shared with twenty participants who have conditional access to three different virtual sites for dialogue, discussion and reflection. This is a preliminary paper that describes the model of collaborative problem solving that was used in addition to some detail about the technological structures developed on the LMS (Moodle) to maximize the role play interface with all participants and to personalize the learning experience.

1 BACKGROUND

Each year a number of experienced teachers and school administrators complete masters level studies to expand and consolidate their understanding of the professional requirements of their careers. In this case, we examine the way that online role play in a Masters level subject can facilitate an intimate understanding of the complex needs of students with learning difficulties and how school management systems can respond effectively to contentious situations. Most of the participants are teachers or school administrators who aspire to leadership roles in regular and special schools. The online program includes various learning activities that aim to inform participants of best practices that promote learning and school responsiveness for students with special needs. The problem for the program developers was to give the participants direct or life like experience in timely and informed problem solving in the heat of the management of a contentious situation in a school. At the same time, the program planners wanted the group to experience, first hand, the influence of diverse perspectives that are often mixed with stereotypical assumptions so they may be able to identify and respond sensitively to these processes in daily collaborations in their profession. The online role

play methodology that was developed in this study provides a forum for: reciprocity, or understanding a problematic situation from diverse perspectives (Falk & Fischbacher, 2000); active and collaborative problem solving (Habermas, 1981) in a safe learning environment; and a structured and informed process of critical reflection (Mezirow, 2000).

In her description of Community Literacies, Lynda Flower (2008) explains how a rhetorical community is able to apply diverse perspectives to a contentious or problematic situation so that all participants are actively involved in a collaborative, problem solving process. In an ideal situation, the learners in the community should progress beyond the rhetoric of either management 'speak' or even of well-intended words and ideas to understand the extreme personal and professional contexts that surround the issues under contention. Reciprocity, or understanding a situation from diverse perspectives, is an important part of problem solving that is difficult to 'teach' in higher education. Values and beliefs underpin the way we see the world and management processes often compromise the decisions that are made by school administrators. Together, life values, stereotypes and management constraints can result in a limited understanding of the problems as they are experienced by all stakeholders. As such, viewing a contentious

situation from the perspective of the parent, teacher, principal or student with a disability involves high levels of communication skill and moral reasoning that may extend beyond immediate or reactive responses that can occur in school leadership contexts (Kohlberg, 1973). The awareness that is provoked in an online role play situation must also include a critically reflective framework to support an interrogation of personal values and beliefs and to substantiate personal and professional changes in behaviour that are related to the management of contentious situations (Mezirow, 2000). The model of collaborative problem solving described in this paper has three distinct phases: reciprocity, collaborative problem solving and critical reflection. Each phase is described briefly in the next section before the technical aspects of the role play are explained.

2 A MODEL OF COLLABORATIVE PROBLEM SOLVING

2.1 Reciprocity

Although there are numerous explanations of the notions of reciprocity, this paper adopts Kohlberg's (1973) moral preference that reciprocity involves seeing the world from the perspective of another. In a more detailed exploration of reciprocity, Falk and Fischbacher (2000) augment familiar psychological interpretations to propose that reciprocity cannot only be determined by pure outcome related consequences such as 'kind actions will be met with kind responses'. Instead they claimed the underlying assumptions or 'intent' that surround the action will predetermine the outcome to some extent. People will shape their response to an action according to the motives attributed to others. In a school context where a student with Aspergers has been suspended, teachers may respond in a limited, stereotypical or rule based way if they are not able to understand the motives of the student, parents or other stakeholders as they collaborate or contrive various solutions to the situation. Yet, understanding how others experience an event, particularly one that may be emotive or volatile, is a difficult and complex sensitivity to teach, and even more so, in an online medium. The online role play, as it was managed in this study, provided the expectation and information required for participants to experience the complexities of a contentious situation from diverse perspectives. As the role play progressed,

contentions arose that reflected real life experiences that emerged from a range of sources not the least of which were personality, pride, power, ambition, love, distrust, finances, obligation, care, confusion, rights, loyalty and so on. Participants were asked to identify and understand the motivations for the concerns exhibited in the role play and to propose approaches that may resolve the problems identified.

2.2 Collaborative Problem Solving

The online role play then provided a situation where the participants could implement an inquiry approach into the complex dimensions of the problem. They were asked to identify the issues involved in the role play and investigate various approaches to resolve the issues. Participants accessed the literature to research policy, theory, praxis and other influences relevant to the context. As in all complex situations, the identified issues are also influenced by emotions, goals, ambitions, skills and abilities of all stakeholders. Habermas (1999) explains how collaboration is a practice that is rarely perfect but that each iteration or discussion will expand common ground and inform participants of shared expectations or otherwise. Fowler (2008) describes how the process of rhetorical community learning draws out the voices of the marginalized as groups of people struggle to understand the social ethic involved in the contentious situation. She claims that differences can be transformed rather than erased or contradicted when there is a commitment to understanding the perspectives of everyone involved. The online role play provides a structured learning environment where an exchange of differences can progress in a supportive and informed way so that contentions may be argued safely and possibly more creative options considered. To facilitate a supportive and considered response the participants in the role play needed three spaces: one, a private asynchronous space to discuss and reflect on the progress of events; two, the public site of action where the role play took place (asynchronous); and finally a debriefing synchronous space in a virtual classroom on Elluminate. The construction of these spaces will be considered later in the paper.

2.3 Critical Reflection

The critical reflection phase of the online role play had three main functions. In the first place it was most important to debrief the participants of the responsibilities, consequences and assumptions of their roles. Although one aim of the role play was to

develop a fictitious and rhetorical experience, the emotional ownership that drove the responses in the role play had to be contextualized as a learning activity that deserved further investigation and reflection. Next, the participants reflected on the power, politics, processes and sub-contexts that emerged in the role play to critically analyse who was influencing decisions and how or why they did this. The motivations for various actions by the characters in the role play were analysed and discussed with partners and colleagues before participants referred to the literature to clarify their insights. Finally, the participants applied the relevance of the role play to their own professional lives to consider how they would manage contentious situations at their schools.

The purpose of the role play was to provide some insight into the way various stakeholders viewed a situation and how members of a learning community could respond together to resolve a complex situation. Participants were dissociated from their roles so they could critically examine the collaborative processes that were involved. The critical reflection stage involves a formal debrief during an synchronous Elluminate session and then an interrogation of the data from all online spaces within the role play. At this point, participants were privy to all the character descriptors and their private conversations in each room. This resulted in deeper, yet post hoc understandings of the motivations and considerations of each person's role as they responded to the various emerging situations.

Although each phase in the role play was distinct, the organization and structure of the technological methodology sustained a level of necessary conflict in the role play to promote a diverse range of collaborative interactions and to sustain interest. A description of the organizational components of the role play follows.

3 THE STUDY

The research question that guided this study was: "How do you create an online learning environment that gives participants experience and practice in the management of a complex and contentious situation?" and

"How do the direct interactions in the learning experience enable reciprocity when participants are actively involved in collaborative, online problem solving of contentious situations?"

This study reports the experiences of one cohort of Masters level students although the role play had

been conducted for two years previously. Ethical permission was sought after the study was completed to ensure the data was not influenced by assessment requirements. A mixed method approach provided data about the technical and personal components of the research questions. Teddlie & Tashakkorie (2010) recommend a mixed method study when the nature of the data collected suits different purposes. In this study, the quantitative data provided information about the technical aspects of the role play including access and participation rates. The qualitative data provided rich data about how the participants collaborated together to respond to the unfolding dilemmas and finally how they analysed and interpreted the motivations of other characters both in the role play and in their own professional lives.

Data analysis was broadly based on Weinberger and Fischer's (2006) four dimensions for analysing argumentative knowledge construction in computer supported collaborative learning environments (CSCL). The interplay between the different roles, rooms and reflections involved various dimensions including: quantitative analysis of participation; qualitative coding of epistemological viewpoints such as moral and ethical considerations as well as educational, sociocultural and relational perspectives; the argument dimension within the main discussion forum and the critical reflection; and the socially constructed dimension of collaborative problem solving within the various meeting rooms.

4 THE ROLE PLAY

4.1 The Context

The initiating context was designed to heighten a range of possible personal and organizational responses. A student with Aspergers was suspended from school after an incident in the playground. From the outset, participants were predisposed to respond in diverse ways. Each participant had access to different information that informed his or her view of the context in a particular way. Details of the incident in the playground were initially unclear and this created contention as participants tried to clarify and resolve the implications of an administrative decision to suspend a student from the school.

4.2 The Characters

Ten roles were structured to include: a principal,

teacher, parent, parents and citizens representative, learning support teacher, student, friend of the family who also had a child with autism, district officer, parent of child who was involved in the incident and a guidance officer. Each participant was given a character portrayal, with a short role descriptor that identified concerns about the contexts. The character portrayal was deliberately brief as participants were encouraged to develop their character and justify the way they interpreted events. Suggestions of characters' values, priorities, affiliations and personalities were made. For example, the father, Tom Moody was given the following descriptor:

You had warned the principal and the guidance officer that your son was being bullied. You feel your son is losing his intention to attend school. You tried to tell the Learning Support Teacher and the Guidance Officer about how your son sees the world but they were no help. You think the Principal and the Learning Support Teacher are deliberately antagonistic.

Participants were partnered so two people played each role. This had the advantage of deepening the collaborative intent of the role play as partners discussed the issues and reasoned an appropriate response. Private, asynchronous forum spaces were set up for each set of partners where they could deliberate to determine the most appropriate responses to each new perspective. Confidential collaborations between partners helped to inform the critical nature of the responses as the partners provided a sounding board for interpretations of the context and the other role players' behaviours. The confidential collaborations also helped to build community as participants assumed the responsibilities of their roles and characters. Pragmatically, two partners were also able to maintain a fast pace of multiple postings as each participant accessed the role play at different times. Rummel and Spada (2005) have suggested that online collaborative problem solving is more effective when there is some level of guidance and structure so the lecturer played a character that guided others towards collaborative possibilities when necessary.

As well as the character descriptor, each participant was also given an initiating action.

You receive a phone call from the principal who tells you your son has been suspended. You tell him how unhappy you are about the situation and you insist that the protocols for the departmental suspension policy should be followed. An interview with the principal was an essential prerequisite to suspension. Remind the principal that this has not occurred.

After the initiating action, the participants could develop their character in any way they chose. The initiating action involved all participants in the role play in the first instance. This resulted in an enthusiastic start to the role play and the momentum did not decline throughout the three weeks of the active and collaborative problem solving phase.

The characters, the initiating action and the context were outlined and discussed at a synchronous Elluminate session two days before the role play began. At this session, the purpose of the role play, the assessment and the expectations of the participants were clarified. Participants were expected to engage with the role play daily and post responses every few days or when necessary.

4.3 The Rooms

Three different asynchronous forum spaces were set up on the LMS to facilitate the use of private and public conversations and to create a life like situation of selective access to information and opinions. The forum spaces were visually displayed as real life rooms so participants could easily imagine entering the family home, the staff room or the principal's office. Only those rooms that the participants could access were visible on their LMS. Different people were allowed access to a combination of rooms where they could have conversations with other characters. For example the teacher, learning support teacher and guidance officer could access the staff room but the principal, district administrator and parent were not able to see the conversations being held there. The staff room was used to clarify staff understandings of the actions taken by the principal and discuss the context and characters in an informal way. Similarly, the parent, his friend and son could access the family home and the principal's office but not the staff room. The implications of some participants having privileged access to information and discussions were designed to replicate real life situations where agendas and situations evolve over time in complex ways. The way each room was used in the rhetoric of the role play informed the critical reflections for the participants as these private conversations were made public after the role play during the critical reflection phase.

4.4 The Role Play

The flow and direction of the role play was controlled entirely by the participants with some guided provocation or support from the lecturer in

role. Ten roles played by 20 people (approx.) in each year provided a range of daily responses that informed debate and developed contention. In the three weeks that the role play was live in 2011 there were 3,576 logs indicating a very active level of participation that was similar in each year of the role play (see Table 1. All activity, 2011). Participants were able to call meetings, make phone calls, question, respond, complain and explain their views on various aspects of the unfolding drama. The nature and functions of the contributions each participant made were also coded in terms of management ‘speak’, stereotypical assumption, or informed participation. The data collected in each category provided evidence for the participants to write their critical reflections and discuss the immediate influence of barriers to collaboration or enhancers to problem solving as they were experienced in each role.

Although Weinberger and Fischer’s four dimensions of analysing argumentative knowledge construction were helpful in organising the data collected in each phase of the study, more research is required to understand the relationships between each construct in terms of the development of the skills of reciprocity, collaborative problem solving and critical reflection. Beach and Doerr-Stevens (2007) speak of a rhetoric of significance and transformation and although there is evidence of that in the emotive participation in the role play and the critical reflections that followed, more analysis of the interplay of the broad participation in the forums and the deep interpretations on the critical reflections are needed. In this project, the site for collaborative problem solving resided in the private discussions shared between the participants in each role. Future iterations of the role play need to make the processes of collaborative problem solving explicit so the experiences of each participant in the partnered discussions may be expanded and analysed more effectively.

Table 1: All activity 2011.

Date	Student	Lecturer	Designer	All
Nov	119	0	0	119
Oct	3329	105	41	3434
Sep	128	135	103	263

4.5 The Debrief

The statistics above and participant comments

indicated a high level of participative action and also a level of compulsion to keep informed of the progress of events. However, it was the emotional ownership of the roles that each person played that made the debrief session an integral part of the process. The debrief explicitly separated the role from the person and also signified an end to the unfolding events. Comments such as: “I was really angry with the principal” had to be understood in the context of the role that was played and the scenarios that evolved, not of the person who played the role. This was done by identifying the issues that arose during the role play and discussing them in a neutral and future oriented way. Participants generally moved their reflections from the contentions in the role play, to similar issues at their school or in their careers, to the literature, and to a broader range of possible resolutions. It was only during the debrief session that many participants were able to emotionally withdraw from the action to fully realize the rich learning potential of the role play.

“I valued the learning that happened on the role play. I was completely absorbed in the events and it has made me think differently about bureaucratic decision making”.

“It was shocking to feel so isolated and ignored as the parent”.

“I couldn’t wait to get home and get onto the site to see what was happening.”

“My husband is really glad this is over because I was online all the time - and he is still worried about how the student is going to get back to school.”

“I really enjoyed the role play and now I will miss everyone.”

5 CONCLUSIONS

The success of the management of the role play depended on establishing a site where public and private conversations were conducive to active involvement by all participants. In effect, however, the success of the learning experience depended on the critical reflections that occurred during and after the conclusion of the role play. Participants were asked to choose and investigate an area of contention that informed their understanding of the issues involved. The final essays demonstrated a sensitive awareness to the range and depth of perspectives experienced by all stakeholders. Participants were able to demonstrate significant insights into the way that values, emotions, personalities, needs and bureaucratic frameworks all informed decisions in school administration, yet, the

most important reflections involved understanding how the diverse perspectives of all stakeholders could contribute to progress acceptable solutions.

To demonstrate their understanding of the contexts experienced in the role play, the participants often used rich texts as direct quotes from the role players. Although this was valuable for the participants, it did not provide the lecturer with any new insights as to how reciprocity or the collaborative problem solving processes developed as new knowledge. A better understanding of the interactions between the layers, sites and dialogue within the role play is required if the skills of reciprocity, collaborative problem solving and critical reflection are to be taught explicitly or if future role plays are to be structured in a more systematic way to enhance the learning experience. Although Kohlberg has an explanation as to how reciprocity or moral acuity can develop, his theories do not explain what happened in the role play to inform the development of a high level critical awareness. In a similar way, a more comprehensive analysis tool is required to clarify how a dialogic community developed to overcome stereotypical assumptions and progress towards problem solving. Clearly, the interface between each role, each site and each context informed that progress but the analysis was unable to measure the depth or process of that understanding.

Apart from further development of the analysis of the processes involved, another limitation of the role play is that it is text based and not in real time. Many participants explained how they were pleased to reflect on the postings before responding and the time lapse allowed the collaborative discussion with partners to be thoughtful and constructive. Synchronous responses may not lead to such a thoughtful approach yet the immediacy of real time brings with it a life like experience. Perhaps the further development of the role play may venture into a 3D space where the immediacy of response is vital and the personalities and contexts may be more intuitive.

REFERENCES

- Beach, R. & Doerr-Stevens, C. 2009. *Journal of Adolescent and Adult Literacy* 52 (6).
- Flower, L. 2008. *Community literacy and the rhetoric of public engagement*.
- Falk, A. & Fischbacher, U. 2006 A theory of reciprocity. *Games and Economic Behaviour* 54.2: 293-315
- Habermas, J., 1981. *The Theory of Communicative Action*. translated by Thomas McCarthy. Cambridge
- Kohlberg, L., 1973. The Claim to Moral Adequacy of a Highest Stage of Moral Judgment. *Journal of Philosophy* 70 (18): 630–646.
- Mezirow, 2009. *Transformative Learning in Practice: Insights from Community, Workplace and Education*. Jossey-Bass.
- Rummel, N., & Spada, H. (2005). Learning to collaborate: An instructional approach to promoting collaborative problem-solving in computer-mediated settings. *Journal of the Learning Sciences*, 14(2), 201–241.
- Teddle, C. & Tashakkori, A. 2010. *Foundations of Mixed Method Research*. Sage. London.
- Weinberger, A., & Fischer, F. 2006. A framework to analyse argumentative knowledge construction in computer-supported collaborative learning. *Computers and Education*, 46, 71–95.