Testing and Validating Frames for Online Organizations

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Abstract: In this paper we suggest that online environments can function as alternate "organizations" for pre-service and beginning teachers who may find themselves struggling in schools. Building on prior work on framing and reframing in organizations and schools, the authors present a new frame of analysis specifically geared for web-based learning/support communities. Data consist of transcripts from three forms of online discourse—an e-mail listsery, an electronic discussion board, and a course-related wiki—from three groups of preservice secondary teachers (grades 6-12) located in three U.S. states. The development and testing of the new frame and its potential use is relevant for teachers, teacher educators, and school administrators.

Introduction

There are many unanswered questions concerning teacher perceptions of school culture and support as it affects self-efficacy (Tobin, Muller, & Turner, 2006). Turning to the fields of sociology, organizational learning, and framing may yield some answers. In particular, applying the research on frames and reframing may help us understand the complex relationship among teachers, climate, and the organization of schools. In this paper, we explore the notion of frames and reframing (Achinstein & Barrett, 2004; Benford & Snow, 2000; Bolman & Deal 1994, 1997; Schön, 1987) to investigate how online networks function similarly and/or dissimilarly to physical organizations. More pointedly we ask: How can prior work on frames and reframing be applied to online support communities? This paper opens with the foundational literature pertinent to beginning teachers, support mechanisms, and notions of framing and reframing. The authors next describe the methods employed to create a system of frames (Scherff & Singer, 2008) for online organizations and provide a brief summary of preliminary findings.

Supporting Novice Teachers through CMC

A common challenge facing pre-service teachers is reconciling the pedagogy they are learning in their university coursework with the day-to-day reality of schooling. Veenman (1984) terms this praxis shock. To combat praxis shock, beginning teachers need both instructional (planning, assessing, managing the classroom, etc.) and psychological (efficacy, stress management, etc.) support (Gold, 1996; Veenman, 1984). One approach to provide instructional and psychological support is through computer-mediated communication (CMC) tools. Because CMC can occur at nearly any time or place, it provides more options for peer support not always cultivated in schools or classrooms (Scherff & Paulus, 2006). Research shows that online support networks provide beginning teachers with "social, emotional, practical, and professional support" (DeWert, Babinski, & Jones, 2003, p. 319), moral support (Merseth, 1990), a space to make connections (Romiszowski & Ravitz, 1997), deeper conceptions of teaching and learning (Ferdig & Roehler, 2003-2004), and practice with collaborative reflection (Nicholson & Bond, 2003). CMC provides additional time to reflect, craft a statement, and respond to others. Via CMC, novice teachers write for an authentic audience about real classroom issues. Moreover, CMC can be better than face-to-face conversations since it provides an instant audience at any time and in any location (Scherff & Singer, 2008). However, there are some drawbacks to using CMC. For example, CMC tools provide few visual or intonation cues (Ferdig & Roehler, 2003-2004), which can make it difficult to establish trust or a sense of community in online learning environments, particularly for novice users.

Frames and Reframing

Crossing the fields of psychology, sociology, linguistics and discourse analysis, and policy studies, frames are how we see things in and make sense of our lives; frames also help us set boundaries, identify problems, form opinions, and discover solutions (Benford & Snow, 2000; Entman, 1993; Goffman, 1974; Judge, 1992). Schön (1983) found that teachers frame difficult situations that surface in their practice through "naming the problem, setting boundaries of attention to it, and imposing coherence to provide directions for change" (cited in Achinstein & Barrett, 2004, p. 719). When faced with a new problem or challenge, reflective practitioners reference their experience with comparable past problems and then amend their current practice correspondingly. Frames are also used collectively, "developed, generated, and elaborated on . . . through three sets of overlapping processes that can be conceptualized as discursive, strategic, and contested" (Benford & Snow, 2000, p. 623). Discursive processes refer to communication between members; strategic processes

concern the exchange and interpretation of values and beliefs among members; contested processes involve challenging and "counterframing" (Benford & Snow, 2000, p. 626).

Bolman and Deal (1994, 1997), drawing from sociology, psychology, anthropology, and political science, identified four frames from which people regard their surroundings: structural, human resource, political, and symbolic. The structural frame stresses goals, specific roles, and formal relationships through a hierarchy of authority and rules. The human resource frame highlights the importance of peoples' needs and goals, a shared concern for others, and empowerment. Central concepts of the political frame include conflict and negotiation. The symbolic frame pays attention to an organization's symbols, meaning, beliefs, and rituals. As Tarter and Hoy (2004) claim, Bolman and Deal's frames are important in organizational functioning.

Achinstein and Barrett (2004), interested in Bolman and Deal's frames as applied to schools and teachers, adapted the model to specifically study how new teachers reframe their views of students and teaching problems. They found that teachers also use the frames to tackle negative challenges in and diagnose problems at their schools. Their managerial frame emphasizes classroom rules and procedures, illustrating how teachers develop authority. The human relations frame focuses on classroom communities and building caring relationships. The political frame sees the classroom as a mirror to the outside world, with the same conflicts, power struggles, and social justice fights. By understanding each frame, teachers can reexamine problematic situations and explore more productive options.

Methodology: Creating the Frames

Our interest in CMC began by studying the ways and the extent to which online networks were helpful to preservice teachers (Paulus & Scherff, 2008; Scherff & Paulus, 2006; Singer & Zeni, 2004). Noting that online conversations among our pre-service teachers paralleled many of the same face-to-face issues studied by Achinstein and Barrett, and that the CMC environment (organization) seemed to parallel that of a school, we wanted to build on prior framing work by creating a frame model for our online spaces (Scherff & Singer, 2008).

At the time of data collection (2003-2004), Lisa taught English education courses at a large, public university (Southern University) in the Southeast United States. Participation in an online discussion board (Blackboard TM) was required a part of the language arts methods course which was taught during the fall semester and coincided with the students' first semester of their year-long internship. Students (n=22) were required to post at least one comment, question, and/or reply per week. The instructor was the only non-student participating in the discussion board. Over the fifteen weeks, a total of 2,209 messages were posted to the discussion board.

Nancy co-directed the English education program at a public, urban university in the Midwest United States. At Midwestern University pre-service teachers in English, speech, and theatre were required to show evidence of process and reflection regarding their teaching. They could satisfy this requirement through a paper journal, in e-mail exchanges with their university supervisor only, or through an asynchronous listserv to the entire cohort of their peers and university supervisors. For those using the listserv, there was no specific number of required messages to post nor did supervisors routinely introduce topics. Listserv members included 24 preservice teachers and 9 university supervisors/instructors. During the internship semester, 1,343 messages were posted to the listserv; 926 of these messages were posted by students.

We approached the research from a constructivist paradigm (Guba & Lincoln, 1994; Hatch, 2002). For constructivist researchers, "individual constructions of reality compose the knowledge of interest" and spend time in "their natural settings in an effort to reconstruct the constructions participants use to make sense of their worlds" (Hatch, 2002, p. 15). Although not a physical space where we could observe for extended periods of time, CMC provided us with a front-row seat to student conversation (Scherff & Singer, 2008). Data analysis proceeded in a modified form of the constant comparative method (Bogdan & Biklen, 2003; Strauss & Corbin, 1998) and consisted of several phases. First, we reread through all postings once trying to match them with the frameworks created by Bolman and Deal (1997) and Achinstein and Barrett (2004). When our data did not fit their frames, we discussed potential frames based on findings from our prior work. For example, for both sets of pre-service teachers CMC promoted storytelling and a space to exchange teaching ideas. Once our initial frame was drafted, we selected four weeks' of online communication—weeks 1, 7, 10, and 15—that represented the beginning, middle, and end of the semesters. Then, we reread our postings and coded them according to the framework we developed. We shared these preliminary findings with each other, checking for agreement. Once 80% agreement was reached, we finalized the frame's wording and began selecting representative cases to present.

Frames for Online Organizations

Our frames highlight the ways that the pre-service teachers used CMC during their internships (Table 1). The frames not only offer a method of viewing an online organization, they show how CMC can foster reframing among pre-service teachers. In the *human resource frame*, students had virtually instant access to others who

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had similar issues and concerns. If participants felt afraid to ask their mentors or administrators for help, CMC provided a place for them to express their needs in a safe, supportive community. This frame helped us to understand the affective elements of online communication, but also brought up sensitive, personal issues to consider. We interpreted the *political frame* as a synthesis of ideas from both Bolman and Deal and Achinstein and Barrett. Beginning teachers have to negotiate the tensions of schools, classrooms, and relationships with colleagues. Also fundamental is the knowledge and expertise individuals can contribute. Nonetheless, without face-to-face contact, misunderstandings can occur between participants. Thus, for the sake of the community at large, the challenge for moderators is to walk the line between participant and observer (Scherff & Singer, 2008). Storytelling, joking, meaning, metaphor, and ritual are central of the *symbolic frame*, just as they are commonplace in physical organizations. For the students this frame offered opportunities to use their creative writing talents to both obtain and give assistance. At first, we found that the students were not used to the lack of structure or direction in CMC. The first weeks' postings were tentative and not very substantive. Thereafter, though, the quantity of messages rapidly increased demonstrating to us that students had become more comfortable with the openness of the online setting (Table 2).

Table 1. Scherff and Singer's Frames for Online Organizations (2008)

	Human Resource	Political	Symbolic	
Central Concepts	Needs, skills, support, relationships	Networks, knowledge, expertise, misunderstandings	Stories, humor, meaning, metaphor, ritual	
Metaphor for CMC	Public Journal	Community Forum	Literary Magazine	
Metaphor for pre-service teachers	24-hour hotline	Roadmap (sometimes well marked and at other times not)	Social Hour	
Moderator Challenge	Issues of Student Privacy and Vulnerability When to "step in" and when to "lurk" Making sure that participants do not get too off task			

Human Resource Frame

Discussions representing the human resource frame focused commonly on requests for teaching ideas/strategies, help with classroom management/discipline, and information related to university requirements. Students often used this frame to reflect upon and think through classroom problems and receive guidance from supervisors and/or other student teachers. The messages were a means for student teachers to write their way through teaching dilemmas. Using both past and present knowledge and the multiple perspectives they gained from the listsery conversations, the pre-service teachers conducted frame experiments, allowing them to test future decisions against past and current experiences (Schön, 1983). This recursive reflection may also have affected how student teachers learned to conduct themselves as members of their profession (Scherff & Singer, 2008).

Political Frame

Whereas the human resource frame provided a way to record students' support of one another, the political frame primarily allowed us to view their negotiation and resolution (reframing) of conflicts—particularly those that existed outside their own classrooms. Other times we noted a negative side to the political frame. While typographical conventions (e.g. emotions, capital letters, font) provided paralinguistic signals to help readers interpret messages, without the non-verbal and facial clues present in face-to-face conversations, misunderstandings occurred.

Symbolic Frame

For all participants, the online space functioned like an actual organization in that it had its own series of rituals, symbols, and humor that built on each other as the semester progressed. The symbolic frame became a natural component as the pre-service teachers relied on humor more than any other emotion to get them through the semester and manage the stress of student teaching, university coursework, and negotiating the schools. Posts in this frame occurred with more frequency. While both groups of students used the symbolic frame, our analysis showed that those at Southern University incorporated it more often. We believe this difference is due to the fact that at Southern University internship supervisors were not part of the discussion board; therefore, students may have felt less guarded in their online talk (Scherff & Singer, 2008).

Week #/Site	1	1	7	7	10	10	15	15
	SU	MU	SU	MU	SU	MU	SU	MU
threads per week**								
week**	13	20	26	16	52	5	45	11
Human								
Resource	11	11	19	9	35	3	29	5
Political	4	6	6	1	6	0	2	0
Symbolic	2	1	14	2	34	0	21	1
Other		4		4	1	2		5

Table 2. Number of Threads that Addressed Frames

Testing and Validating the Frames

To test and validate the frames, we completed a preliminary analysis of online communication (wiki) between pre-service (n=70) teachers enrolled in an introduction to education course and classroom teachers (n=20) enrolled in a doctoral seminar on effective teaching at the University of Alabama. Assigned to groups of 3-5 students by content area, the pre-service teachers were asked to post reflections on their classroom observations on the wiki. Each doctoral student served as an "online buddy/coach" to 1-2 of the small groups; they were directed to respond to whatever the pre-service teachers posted to the wiki.

Our overarching questions for this phase of the study were: How or do the students frame and reframe classroom and school events? Does the form of CMC affect the framing and reframing? In particular, we are interested in (1) which frames are used most often and if there are (2) any differences in the types of talk and reflection between undergraduate and graduate students and (3) any effects that the graduate students have on the undergraduates in terms of their framing and reframing of classroom events.

In our preliminary analysis, we looked at all of the communication, a total of 44 posts, among one group's members (n=3) and their mentors (n=2) from February 1 to March 10. Twenty-six posts fit under the political frame, 22 under Human Resource, and 19 under Symbolic; in addition, half of the posts were double or triple coded.

While in our previous work, the political frame was used more to negotiate conflicts, in the present case, it was used more like a community forum to negotiate both the purpose of the wiki and how to use it. We believe this is due to two factors: (1) none of the participants knew each other well and (2) only one had experience with the wiki format. This lack of familiarity, led to "figuring things out" rather than disagreements or conflict. For example, one early post concerned what was allowed on the wiki:

"Please correct me if I'm wrong on the following: 1) We're not allowed to use the teacher's name, 2) We're not allowed to use the school's name, 3) We're not allowed to use the students' names" (Wanda)

The human resource frame was used primarily to initiate the online relationships and set the parameters for the discussion. Adam, a mentor, made the first wiki post: "Hi everyone! Our names are Adam and Jill, and we are so excited to mentor you through your first teaching experience this semester . . ." The symbolic frame, used only slightly less than the other two frames, like in our past research seemed to start off with less frequency but then quickly became used often by the students for storytelling or responding to stories. After Adam and Jill told their teaching histories (stories), each of the pre-service teachers followed suit and told their own stories of why they were in the teacher education program. The more they wrote, the sooner—and with more frequency—humor was incorporated into their stories.

With only a very small set of preliminary data, we cannot make any definitive claims about the frames that we created or the extent to which students frame and reframe. However, based on this beginning analysis and "lurking" that we have done on the wiki, we can make two assertions. First, the wiki format is not as conducive to student discussion as an email listserv or a discussion board. Because it is another website that students have to go to (in addition to the course's Blackboard site and their university email account), it does not seem as readily accessible or present in their minds. Second, unlike emails or discussion board posts, when reading the wiki, students have to scroll through many posts to get to the most recent—this might be distracting for some, causing them to not read or post as often. The intent of the wiki—and the assigning of students to small groups—was to make students feel more open to posting their thoughts and concerns. However, it might be that this, ironically, created less collaboration. With fewer students to read and respond, the opportunities for input (reframing) were greatly reduced. Our next steps are to get feedback from the students regarding the wiki format and analyze the posts from the entire semester. Only then can any claims be made with greater certainty.

^{**}Some threads were multiple coded; SU=Southern University, MU=Midwestern University

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PART III

PRACTICES ASSOCIATED WITH TECHNOLOGIES