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The Process of Disengaging From Online Learning Community Revealed Through Examination of Threaded Discussions

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Abstract: The disengaging process is an important aspect of the lifecycle of distributed collaborative pursuits such as virtual groups, online social networking, and e-learning. To explore the disengaging process in online learning, this research analyzed 667 discussion board posts made by a close community of e-learners during the final 1.5 years of their time together in a graduate degree program. Using a model of disengaging to frame a qualitative analysis of the posts reveals findings about the ways the students change their roles as they near the time of graduation, and demonstrates the complex inter-relationship of elements of the disengaging model that emerges as the students shift their focus away from the online learning community.

Keywords: disengaging process; online learning communities; threaded discussions; distributed collaboration; online community departures; e-learning.

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Biographical notes: Michelle M. Kazmer is an Associate Professor at the Florida State University College of Communication & Information, where she teaches in the areas of information organization, assessing information needs, and theory development. Her research focuses on distributed knowledge processes, particularly those among online learners, and has been published in venues including *New Media & Society*, *American Behavioral Scientist*, *Library & Information Science Research*, and *Library Quarterly*. She is co-editor with Kathleen Burnett of the *Journal of Education for Library & Information Science* and with Caroline Haythornthwaite co-edited the volume *Learning, Culture & Community in Online Education*.

1 Introduction

This research study used a model of disengaging from online social worlds (Kazmer, 2007, 2010) to analyze discussion board posts made by students in an online learning community. Studying the process of disengaging from shared online settings is important because the experience of members near the end of their time together influences their satisfaction with the online experience, shapes their expectations for future online settings, and affects how knowledge built together online can be used afterward.

The participants in this research study were students in a special scholarship cohort within an online master's degree program in library and information science. One benefit of the scholarship was the availability of a school-sponsored online community space that was limited to the scholarship students, their faculty advisers, and mentors from the library profession. A coding scheme developed from the model of disengaging was used to analyze the content and purpose of 667 posts made to the students' community-support discussion board by 20 individuals during the last 1.5 years of their experience in the online degree program.

This article uses empirical research to explore how individuals prepare to disengage from online communities and how they work to continue their friendships and professional relationships afterwards (Kazmer, 2006). It takes advantage of a transactional approach to focus on the intersections of participation that occur when the online learning community starts to dismantle but the actions of the students and their tools remain intertwined together. This understanding can be used to improve support and design for online communities. The disengaging model used here was originally created via grounded theory analysis (Charmaz, 2006; Strauss and Corbin, 1998) of interview data collected from online learners around the time of their graduation. The model was subsequently modified (Kazmer, 2010) based on further grounded theory analysis of interviews with members of a distributed research team near the end of their project. Applying the model as done in this article uses a different kind of data (naturally-occurring online discussion rather than elicited data from interviews) but from a population similar to that used to form the model (online graduate students), making the model more robust and increasing its utility for describing the disengaging process and understanding and perhaps improving online experiences.

2 Departure processes: distributed communities, time-limited groups

There are relatively few studies of the endings of online community, although good examples are found in Bruckman and Jensen's (2002) analysis of the end of MediaMOO, Ducheneaut et al.'s (2007) exploration of the death of gaming communities, Hampton's (2003) examination of the community of Netville, and Kolko and Reid's (1998) discussion of online community failure. Studies of the temporal trajectories of shared narratives (Benford and Giannachi, 2008) and social networks (Golbeck, 2007; Ridings and Wasko, 2010) also nod to the ending phases of online community participation.

Recent research into distributed knowledge has addressed phenomena related to departures, and to provide more framing of the departure processes of online learners requires a brief exploration of these research findings from outside the arena of online community. The following discussion summarizes relevant concepts from group process models, transient groups, and the social aspects of online learning.

Group process models

Studies of group process that include group phases from formation to conclusion take different perspectives. Tuckman and Jensen (1977) added the stage "adjourning" to Tuckman's group development model, which originally included four stages: forming, storming, norming, and performing (Tuckman, 1965). Gersick (1988) explored time-limited task teams, i.e., teams that ended at a pre-specified time. Gersick analyzed the "conclusion" stage of time-limited teams, in which members complete their tasks, focus on outside requirements and expectations, and express more emotions (positive and negative) about fellow members (Gersick, 1988). The theory of Arrow, McGrath, and Berdahl (2000) presents groups as complex systems (see also Wheelan, 1996; Wheelan and Williams, 2003), including a component on "group metamorphosis" that provides a theory for the "death and transformation" of "groups that come to an end" (Arrow, McGrath, and Berdahl, 2000, p. 213). These process models all indicate that groups have endings and that those endings can be characterized.

2.1 Transient groups

It is also useful to focus briefly on the characteristics of endings that are "meant," or desirable – the endings of transient, or time-limited, groups. Transient groups form with the knowledge that their time is finite, and that they have a shared task to complete. Planned endings are distinguished from undesirable and unplanned endings resulting from a conflict or other emergent problem and having adverse effects on group members and outcomes (Bruckman and Jensen, 2002; Dyck and Starke, 1999; Hampton, 2003; Kolko and Reid, 1998). The transient nature of the group and group members' awareness of that transience helps shape the end of the group and members' disengaging from it (Schlossberg, 1981). When the group is known to be transient and the members expect to disengage and do so at the appropriate time, it can be classified as "normative" disengagement (Danish et al., 1997, p. 155) or "planned dissolution" (Forsyth, 1990).

When groups end it cannot be assumed that all relationships cease among group members, and even temporary teams have permanent aspects (Arrow, McGrath, & Berdahl, 2000). In large organizations, work groups form and dissolve but the members remain within the organization, poised to re-form into different groups (Keyton, 1993, p. 85). Individual group members maintain their own networks to facilitate work as they move from project to project (Nardi, Whittaker, and Schwarz, 2002).

2.2 Social aspects of online learning

In directing attention to online learners, additional factors emerge from the literature. "Social practices" (Greenhow and Robelia, 2009, p. 1131) in online learning communities are connected to knowledge building, mutual support among learners (personal, academic, technical, and professional), and developing long-term networks and skills to support lifelong learning and contributions to local and professional communities (Greenhow and Robelia, 2009; see also Brown, 2008). Greenhow and Robelia (2009) argue that using technology to support social practices can affect individuals' future academic and professional success, and Zhao and Elesh (2008) stress that while technology can support co-location, technology cannot create co-presence. Even for

communities designed to end, when we expect the community to use a specific communication tool, the factors need to be in place to encourage people to use that tool best or to use different tools (Yuan et al., 2009).

Online learners must be considered in the totality of their lives; they do not exist only online and they as individuals, and their online learning community, are intertwined with others. Online learners in hybrid settings mixing periodic face-to-face meetings with online knowledge co-construction combine features of online communication (e.g., lack of visual cues, geographic distribution) with features of face-to-face encounters (e.g., verified and persistent identity, affective bonding) (Wojcieszak, Baek, and Delli Carpini, 2009). Prior theorists have argued that while online learners co-construct knowledge together, they (a) incorporate knowledge, affect, and norms from their physically proximate settings into their co-constructed knowledge and (b) incorporate the knowledge, affect, and norms they learned and/or co-constructed online (which include features of every learner's physically proximate settings, see e.g. Mutz, 2006) into their own local settings (Haythornthwaite et al., 2007; Kazmer, 2005a).

These theories of knowledge co-construction highlight the importance of not viewing online learning as occurring separately from the rest of the learners' lived experiences, and the need for looking at their whole experience, not "just" that which "occurs online" (Kazmer, 2005b; Wellman and Gulia, 1999; Wellman and Haythornthwaite, 2002). Examining departures from online learning communities thus becomes more nuanced, because it is not restricted to leaving one community to go to another. Instead, it indicates that the online learning community is one of many being experienced by each individual learner; one of many that may be co-experienced among this group, sub-groups, or partially-overlapping groups; and is part of a longer educational trajectory (see also Chayko, 2002).

Relatively little attention is paid in the research to the way learners change their identities-- enacted and internally felt--predictably or idiosyncratically as they interweave online learning with the rest of their lives (Kazmer, 2002; see also Bargh, McKenna, and Fitzsimmons, 2002). Online identity construction draws on the affordances of available tools and the norms that are shared online, and on long-practiced modes of identity construction offline (Hardey, 2008).

This analysis of the literature with respect to online communities and departure processes indicates a need for further study and highlights some sensitizing concepts (Strauss and Corbin, 1998) to be incorporated into such study.

3 Analytic frame

The primary framework for coding and analyzing the data in this study was the model of disengaging explicated by Kazmer (2007, 2010) and summarized here. The model was originally built with grounded theory methods from data collected via qualitative interviews with online learners. The original model used the *social world* construct (Strauss, 1978) to describe the communication, "activity," (p. 122) technology, and space shared by the online learners; throughout the definition of the model the term "social world" will be used. Their shared social world is *intrinsically transient* because the students know their mutual experience will end --in the form in which it existed -- when they earn their degrees. As the time for departure (graduation) draws near, the students begin to disengage from, and dismantle, their shared social world. The disengaging

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model (Figure 1) conceptualizes the process through which participants in an intrinsically transient social world disengage. It includes twelve dimensions, grouped temporally as follows:

[insert Figure 1 about here]

3.1 Dimensions that span membership and disengaging:

1. Experiencing intrinsic transience: Participants are aware their shared online learning world will end when they all graduate (see also Janicik and Bartel, 2003). This awareness affects how students develop relationships with each other, and lets them reassure themselves that their "real" lives and relationships will return to normal eventually. Students can minimize the impact of their learning tasks on relationships and leisure pursuits, because their involvement is suspended for a finite amount of time.

2. Entrainment with a cohort: In the online degree program from which the model emerged, students bond with a cohort during a face-to-face orientation. The progress of the cohort provides a reference by which students gauge their own progress through the program. At the end, students must disengage from their cohort as well as the larger social world (see also Ericksen and Dyer, 2004; Graham, 2003).

3.2 Dimensions that relate to the final months of disengaging before departure:

3. Managing time: When the time for graduation approaches, students become keenly aware of the amount of time they have spent together and that the end is near. This newly acute awareness motivates students to disengage, and they begin allocating resources of time and money carefully in anticipation of departing the learning social world.

4. Shifting focus: In the last few months before graduation, participants pay less attention to the learning social world and more attention to other social worlds and tasks (see also Ford and Sullivan, 2004). Because of expertise they have developed within the social world, students no longer need to focus as intently on their online learning tasks to perform them well.

5. Pursuing goals: Students change their goals within the social world from doing well to finishing their degrees (see also Ford and Sullivan, 2004). Participants also change their goals in other social worlds, e.g., for degree-seeking adults, this can mean seeking higher status elsewhere, especially in the profession they are joining by earning the degree.

6. Adapting role and identity: Disengaging students adapt their role within the social world to reflect their expertise within the social world and their disengagement from it. They begin to take on their future identity as professionals and graduates of the degree program (see also *anticipatory socialization*, Merton, 1968).

7. Moving support: Disengaging members rely less on relationships within the online social world for emotional and professional support and start to (or once again) rely on support networks primarily at home.

8. Changing the footing of relationships: Disengaging students try actively to understand how their relationships might continue after they graduate, when they have lost their shared tasks and infrastructure (Goffman, 1981). After disengaging, their relationships have changed to *dormant* ones, where people feel a sense of connection and

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believe it could be reactivated easily, but do not communicate frequently (see also Ellison, Steinfield, and Lampe, 2007).

9. Joining logical next worlds: Disengaging students who have a place in the logical next world (for these online learners, this is usually a profession) often struggle to make a smooth transition from school to profession. Disengaging members without a professional position already arranged focus primarily on securing one.

3.3 Dimensions that span the end of participation and completion of disengaging after departure:

10. Taking leave and graduating: For online learners, graduating marks the end of their time in the social world. Participants say good-bye to one another, and prefer to do so face-to-face. Some participants who are not ready to leave try to avoid this step by delaying their departure.

11. Disengaging from the cohort: Participants disengage from the cohort when they stop thinking of themselves as cohort members and of their cohort as the primary reference of progress (see also Wekselberg, Goggin, and Collings, 1997). Learners begin to think of themselves as individuals earning a degree and taking a position in the profession rather than as members of a learning cohort.

12. Closing membership: After the learning social world is dismantled, former students finish disengaging in three ways. They forget details about their time together; they fill in the time newly available in their schedules; and they tie up loose ends associated with the learning social world.

The twelve steps of this model overlap, interlock and interweave, and students do more than one step at a time. Some steps are actively sought or avoided by the students, and some are initiated or shaped by outside influences. The twelve-step disengaging model was used as the primary means to structure the data analysis in the current study (see below).

4 Research setting and analysis methods

This study used the disengaging model as a framework for analyzing the experiences of master's degree students in a different academic program from that in which the model was developed. These students attended the School of Library and Information Studies at Florida State University (FSU-SLIS) to earn a master of science in library and information studies (MSLIS). FSU-SLIS has offered a fully-online MSLIS degree since 1997, and students can earn the degree without coming to campus. Courses are managed through a university installation of Blackboard and include various modes of asynchronous communication and content delivery plus weekly synchronous meetings using the instructor's choice(s) of audio, video, text, and desktop sharing tools.

I was the principal investigator (PI) on a three-year project, "Librarians Serving the Public" (LSP), funded by the U.S. Institute of Museum and Library Services. LSP provided scholarships for students to earn a MSLIS and then work in libraries in Florida. LSP paid the students' tuition and provided three additional benefits: (a) mentoring by experienced librarians; (b) an online community for the students hosted at FSU-SLIS; and (c) in-person meetings on campus and at the Florida Library Association annual conference.

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The initial community of students included 25 students who were matched with mentors, given an online community space, and came to campus for workshops. At first, the students used the online community space in varied ways that included several discussion boards and a learning module about mentoring. After they settled into a routine, they communicated with one another and with non-scholarship students in their classes, and worked with their mentors outside our Blackboard-based community. At that time, the community site was re-configured to reflect its actual use. From then on, the students used one discussion board called "Community News."

The analysis presented here is of posts on the Community News discussion board during the latter 18 months of the project, until the initial cohort of 25 students graduated. Two researchers analyzed 667 posts made by 20 participants. Four students did not post during that time period, and one student did not respond to requests for permission to analyze the posts. As the PI of the scholarship project, I have knowledge about the students and their courses, their experiences with their mentors, their in-person meetings on campus and at conferences, and the general timing and flow of the scholarship experience. Therefore, an assumption of this research is that my perspective in reading the discussion posts differs from that of someone not affiliated with the project. To help ensure that the coding of the posts included a "naive" perspective, a research assistant who was an undergraduate on-campus student in a different degree program, and not associated with the LSP project, assisted with the coding.

Together, the two coders used the theoretical model of disengaging to create a codebook with codes and scope notes. We discussed open or emergent coding, developing shared understanding of how to handle portions of posts that were not adequately described by existing codes. Posts could have more than one code because a post can include more than one topic and more than one intention (Dickey et al., 2007). The researchers coded 10 posts together and made clarifications to the codebook. Subsequent posts were coded in sets of 25 and coding compared after each set. After 5 sets of 25, conflicts were reduced to approximately 5 code conflicts per 25 posts. Coding conflicts generally arose when one coder included an additional code that the other coder had not. Code conflicts where both coders coded the same piece of text with different codes were rare. Based on the emergent/open coding during the 25-post test groups, two codes were added to the codebook. While not subject to quantitative measure of inter-code reliability -- in particular because the procedures allowed for open/emergent coding -- this level of agreement has been indicated as sufficient to allow continued coding in this qualitative study (Dickey et al., 2007). The remaining 542 posts were divided into two sets of 271 and coded individually.

Once initial coding was complete, the main researcher continued the qualitative analysis. The comparative method was used (not a *constant* comparative method because all messages were coded before comparison began) to explore how the posts that were coded with specific dimensions of the theoretical model did and did not match how the dimensions were originally conceptualized. Because it is important that the model is grounded in the data -- and not that the data match the model -- the dimensions of the model were continually enriched and refined. The next section includes the findings that emerged through this analysis, including similarities, differences, and additions.

5 Findings

This section highlights the findings that emerged as differing from, or further honing, specific aspects of the disengaging model. It then explores findings that emerged because this analysis examined naturally-occurring data (discussion board posts) rather than elicited data (interviews).

The first finding has to do with roles. The initial disengaging model (Kazmer, 2007) and its subsequent modification (Kazmer, 2010) have consistently indicated that members of distributed collective endeavours such as online learning communities have distinct roles and that those roles change in consistent ways over time (see also Gleave et al., 2009). This finding persists in the new data. Members in the online learning community have distinct roles within the community; they also have roles outside the community *and* the "inside" and "outside" roles intersect. These roles change, in apparently predictable ways, over time through the disengaging process.

A primary role type that emerged from this analysis is the *social coordinator*. Social coordinators are important catalysts for offline meetings and spur participants to negotiate the details (where? when? how will we get there? how much will it cost?) required for a successful offline meeting. This post from P06 shows a social coordinator arranging a meeting even though she will not be able to attend: "Hello, all! For [dinner], I have: [5 students]. There is a new [restaurant] across from the Disney area at Lake Buena Vista on the other side of I-4. I called but they do not take reservations, even for groups. They will do call ahead seating, though. Someone will have to call them about 6:00 and tell them how many are coming. I won't be able to come!"

Social coordinators keep the online learning community functioning within itself. They facilitate successful online communication, smoothing over minor conflicts between other participants and making inspirational posts to the community. Inspirational posts include spontaneous messages that are general, such as "Happy Monday everybody!" or that are specific to the group's shared events, such as "11100 base-2 days left!" (reminding everybody how long until graduation).

The second highlighted set of findings is on shifting focus, but reflects other dimensions of the disengaging process too. Examining the coded posts chronologically indicates that the students initially focused on school-related topics. Near the end, students realize their time in the program is not only temporary but is almost over (i.e., they experience intrinsic transience). Simultaneously comes a shift in focus away from their coursework, which has become easier over time (to them, because of their increased expertise) so it requires less focused effort, and which becomes less important in contrast to the larger goal of graduating. Students' focus shifts toward managing the end of their participation. During the last semester of posts, the posts shift away from school-related topics to four other things: (a) *logical next worlds*, (b) keeping in touch, (c) understanding access to resources, and (d) off-topic posts.

Students shift their attention away from tasks within the online learning community to their logical next worlds. Students who already had jobs in the library profession worried about achieving promotions or raises, or considered the possibility of moving up by changing employers. Student without jobs worried about getting them and used their student-colleagues as sounding boards for ideas (e.g., "I'm interested in working in children's services, but can't decide between public libraries and school libraries") and as sources of information (e.g., who's hiring? do I want to work there?).

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The students realize they need to plan how to keep in touch with each other, demonstrated by a conversation that begins as casual sharing of non-university email addresses, evolves into organized sharing of personal contact information including addresses and phone numbers, and culminates in one member's using geographic information system (GIS) skills he developed as a student in this program to build a geo-spatial map based on each student's location. This increasingly-detailed and increasingly-structured sharing of contact information also demonstrates how the participants prepare to change the footing of their relationships (see also Ellison, Steinfield, and Lampe, 2007). They know from prior educational experiences that graduation can fracture even close relationships, but they also want and need to maintain professional relationships with each other over time. For these reasons, they use all the resources they have to try to ease the change in footing. As P01 wrote, "I am a little more than a month away from the end of my last semester, and I am going through anxiety [...]! The next stage of our education, the real world, is going to be a lot better knowing all of you are out there!"

The students realize they will shortly lose access to university resources such as email addresses, web sites, online course sites, and library materials. They struggle to find and share accurate information about how their access will change and how they can manage this loss of access actively. P02 addresses several of these losses and proposes a solution: "I agree with you about the FSU databases. I will go into withdrawal without them :-). I have registered for summer and fall and have luckily gotten the classes I wanted. Since people will be graduating soon, I have a suggestion. I wonder if the LSP group would be interested in an email and/or phone type directory for the group. I volunteer to collect the information and then send it out to the LSP group. That way we could keep in touch with each other after graduation. What do you all think about this idea?"

Near the end, the students generated off-topic and inspirational posts, again reflecting a shift in focus from the task-oriented posts of the prior months. These posts include graduation countdowns ("My last assignment is due on April 18th, giving me only a whopping 22 days left! 21 by the time you read this!") and confidence boosters but are exemplified by a thread begun by one student who reported entering his couch into an ugly couch contest: "I have entered my love seat in the Ugly Couch Contest of the Florida Times Union. You can visit the contest site at the following [URL]. I think you have to register to vote, so if it's too much trouble, no bother. HOWEVER, if you would like help get this homely but comfortable piece of furniture into the five finalists, your vote would be most appreciated!"

Additional findings emerged because of the nature of the data and its effect on the disengaging process as reflected in the model. Two key aspects are highlighted here: (a) coordinating work in the discussion board posts, and (b) reflexivity of the discussion board communication.

Examining discussion board posts made by the participants over time, instead of analyzing research interviews as with the original model, reveals the extensive coordinating work that occurs among participants (this resembles *articulation work*, see Strauss, 1985; 1988). In the elicited data collected via interviews, participants talked *about* their shared plans for meals, rooming together during campus visits, etc., and they occasionally mentioned *how* those plans were coordinated, but although they were asked to describe such coordination, it could not be seen directly. The timing and purposes of face-to-face meetings was key for all participants, but while an interviewee might say "we had a lot of emails about our get-together," examining the discussion board in this

study revealed more. It made it possible to see the posts and who participated in these coordinating threads; and to see the posts' content over time and across participants. It revealed how the students used online communication to coordinate many tasks together (e.g., course selection, textbook purchases), but especially to plan face-to-face meetings.

Analyzing discussion board posts also revealed in a new way the work the students devoted, individually and collectively, to their online communication. As coding of the discussion board posts began, it emerged that a new code was needed to indicate when participants were using the discussion board to talk about using online communication channels. This kind of reflexivity emerged slightly in the previous studies, but there it was mostly when participants talked about their strategic communication practices. For example, in the earlier interview data, students would talk about how they consciously managed their own email behaviour and expectations of others' email behaviour to maximize their long-term professional networking prospects. In the current discussion-board study, the students engaged in explicit discussions with each other addressing, for example: the proper use of the discussion board; what it was and was not "good" for; judgments of others' use of online communication (especially their instructors); and the desired and acceptable frequency of online communication.

6 Discussion

One role type, social coordinator, was emphasized in this analysis because while few participants act as social coordinators, coordinating posts occur frequently. This follows on other studies (Kazmer, 2005b, 2007) in indicating that, although the ostensible purpose of an online learning community is *learning*, an important role among the *students* is the social coordinator. This may be because most *learning* is still coordinated by the teacher and an array of administrators, advisors, and technical support – although this is changing during the shift toward learner-led education (Bramhall et al., 2010; Bruns, 2007).

The role of social coordinator is key to the disengaging process in two ways. First, social coordinators help arrange the ritual gatherings associated with making a transition, i.e., they arrange for the group to meet after graduation for a shared photo, or they coordinate a final dinner together. Second, social coordinators help shepherd the group through the process of disengaging by reminding them where they are in the process and moderating conflicts that arise during this potentially stressful transition.

One thing learned via participant observation with this group is that the social coordinators in the group did *not* maintain that role *with this group* after graduation. Other former members took on the social coordinator role to do things like start a Google group for the former students and arrange subsequent meetings at conferences. This suggests that the original social coordinators have probably taken on that role within their "next worlds" (i.e., new workplaces), but that hypothesis remains untested and suggests future research.

Participant observation also indicates that the students have achieved relationships on a new footing that involves less communication but acknowledges their previous closeness and acts as a reliable professional network. This finding was not captured via the discussion board data, in part because students lost access to the discussion board immediately upon graduating.

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The finding that these online learners spent time negotiating their access – and loss of access – to infrastructural and content resources at FSU-SLIS echoes prior research (Kazmer, 2006, 2007) indicating that these resources are not just functional information sources. They hold strong emotional and intellectual relations with students' time in the degree program, and act as representations of the knowledge they built.

7 Limitations

This research and its findings are not intended to be generalizable; the disengaging theory is an ongoing work and is still at the substantive level. This research examined one group of online learners in a specific circumstance, and the principal researcher had connections with the learners and could also (at the time the discussion board was active, not at the time of the analysis) shape the online community by scheduling events, participating in the online discussion, and communicating with the students in other media that were not directly captured on the discussion board. The additional knowledge and influence that came with this participant observer role certainly shaped the analysis, although this effect was mitigated as much as possible by the second data coder.

8 Conclusions and implications

What was revealed through this analysis to inform theory, research, or practice? First, the discussion above demonstrates the intensive interconnectivity of the twelve aspects of the disengaging model. Although the discussion focused on two dimensions (changing roles and shifting focus), it was impossible to write about those two dimensions and stay closely grounded in the data without drawing in most of the other dimensions explicitly or implicitly. This impossibility of treating the parts of the model independently reinforces the coherence of the disengaging model, indicating that its concepts continue to appear in the data as closely connected aspects of one process. It also indicates that it is important to continue, in new analyses and studies, to constantly compare the concepts to be sure the differences between them remain grounded in the data and are not maintained as distinct just because that is how they were defined in the original model.

The impact of the data source (discussion board posts rather than qualitative interviews) on the model was discussed above, but leads also to implications about the effect of the technological infrastructure (e.g., Blackboard) on students' communication and collaboration (see also Coopman, 2009; Lane, 2009). Design decisions by Blackboard and implementation decisions by individual universities and instructors shape the timing, content, and flow of students' online communication and collaboration. This study serves as a reminder to be attentive to those influences in teaching and research. It also highlights the importance of multiple data sources in qualitative research; how much richer might the original interview study have been had it incorporated an analytic comparison to the students' online community discussions? This current study was strengthened by my participant observation in the learning community, but what might have been gained by having the resources to interview each participant in depth? While the findings of both studies are still rich, the comparison between the two data types gives still more support to the desirability of analyzing multiple data types whenever possible.

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Many of the findings in this study of disengaging connect to the idea of socio-technical capital (Resnick, 2002; Kazmer, 2006). While the social capital literature and by extension the socio-technical capital literature is fraught and contentious because of its basis in "capital," the overall problem -- that members of an online community build "capital" with each other and are left with "currency" they cannot access or spend because the community in which it was saved and had value is gone -- persists as a theme throughout repeated research and seems to need further examination (see also Ellison, Steinfield, and Lampe, 2007).

Overall, the process, types, and results of the process of *disengaging* from online, hybrid, and mobile temporary shared pursuits remains under-studied. It is important that we continue to examine this research area so we can better support the disengaging process (and subsequent re-engaging in other communities, knowledge and resource re-use, and maintenance of relationships) through system design and learning practice.

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References

- Arrow, H., Mcgrath, J.E. and Berdahl, J.L. (2000) *Small groups as complex systems: Formation, coordination, development, and adaptation*, Thousand Oaks, CA: Sage.
- Bargh, J.A., McKenna, K.Y.A. and Fitzsimons, G.M. (2002) 'Can you see the real me?: Activation and expression of the 'true self' on the Internet', *Journal of Social Issues*, Vol. 58, No. 1, pp.33-48.
- Benford, S. and Giannachi, G. (2008) 'Temporal trajectories in shared interactive narratives'. *Paper Presented at the SIGCHI Conference on Human Factors in Computing Systems. 2008.* Florence, Italy.
- Bramhall, M.D., Lewis, J., Norcliffe, A., Radley, K. and Waldock, J. (2010) 'The strategic development of learner autonomy through enquiry-based learning: A case study', *Industry and Higher Education*, Vol. 24, No. 2, pp.121-125.
- Brown, J.S. (2008) 'How to connect technology and content in the service of learning', *Chronicle of Higher Education*, Vol. 55, No. 8, p.A120.
- Bruckman, A. and Jensen, C. (2002) 'The mystery of the death of MediaMOO: Seven years of evolution of an online community', In: Renninger, K.A. and Shumar, W. (eds.), *Building virtual communities: Learning and change in cyberspace*, (pp.21-33), New York: Cambridge University Press.
- Bruns, A. (2007) 'Beyond difference: Reconfiguring education for the user-led age'. *Paper presented at the ICE3 Conference. 2008*, available at <http://snurb.info/node/721>
- Charmaz, K. (2006) *Constructing grounded theory: A practical guide through qualitative analysis*, Thousand Oaks, CA: Sage.
- Chayko, M. (2002) *Connecting: How we form social bonds and communities in the Internet age*, Albany, NY: SUNY Press.

Title

- Coopman, S.J. (2009) 'A critical examination of Blackboard's e-learning environment', *First Monday*, Vol. 14, No. 6, available at <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2434/2202>
- Danish, S.J., Owens, S.S., Green, S.L. and Brunelle, J.P. (1997) 'Building bridges for disengagement: The transition process for individuals and teams', *Journal of Applied Sport Psychology*, Vol. 9, No. 1, pp.154-167.
- Dickey, M.H., Burnett, G., Chudoba, K.M. and Kazmer, M.M. (2007) 'Do you read me?: Perspective making and perspective taking in chat communications', *Journal of the Association for Information Systems*, Vol. 8, No. 1, pp.47-70.
- Ducheneaut, N., Yee, N., Nickell, E. and Moore, R.J. (2007) 'The life and death of online gaming communities: A look at guilds in World of Warcraft'. *Paper Presented at the SIGCHI conference on Human factors in computing systems. 2007.* San Jose, CA.
- Dyck, B. and Starke, F.A. (1999) 'The formation of breakaway organizations: Observations and a process model', *Administrative Science Quarterly*, Vol. 44, No. 4, pp.792-822.
- Ellison, N.B., Steinfield, C. and Lampe, C. (2007) 'The benefits of Facebook 'friends': Social capital and college students' use of online social network sites', *Journal of Computer-Mediated Communication*, Vol. 12, No. 4, available at <http://jcmc.indiana.edu/vol12/issue4/ellison.html>
- Ericksen, J. and Dyer, L. (2004) 'Right from the start: Exploring the effects of early team events on subsequent project team development and performance', *Administrative Science Quarterly*, Vol. 49, No., pp.438-471.
- Ford, C. and Sullivan, D.M. (2004) 'A time for everything: How the timing of novel contributions influences project team outcomes', *Journal of Organizational Behavior*, Vol. 25, No. 2, pp.279-292.
- Forsyth, D.R. (1990) 'Development and socialization', In: Forsyth, D.R. (ed.), *Group Dynamics*, (pp.75-108), Pacific Grove, CA: Brooks/Cole.
- Gersick, C.J.G. (1988) 'Time and transition in work teams: Toward a new model of group development', *Academy of Management Journal*, Vol. 31, No. 1, pp.9-41.
- Gleave, E., Welser, H.T., Lento, T.M. and Smith, M.A. 2009. A conceptual and operational definition of 'social role' in online community. *42nd Hawaii International Conference on System Sciences*.
- Goffman, E. (1981) 'Footing', In: Goffman, E., *Forms of Talk*, (pp. 124-159), Philadelphia, PA: University of Pennsylvania Press.
- Golbeck, J. (2007) 'The dynamics of web-based social networks: Membership, relationships, and change', *First Monday*, Vol. 12, No. 11, available at <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2023/1889>
- Graham, C.R. (2003) 'A model of norm development for computer-mediated teamwork', *Small Group Research*, Vol. 34, No. 3, pp.322-352.
- Greenhow, C. and Robelia, B. (2009) 'Old communication, new literacies: Social network sites as social learning resources', *Journal of Computer-Mediated Communication*, Vol. 14, No. 4, pp.1130-1161.
- Hampton, K. (2003) 'Grieving for a lost network: Collective action in a wired suburb', *The Information Society*, Vol. 19, No. 5, pp.1-13.
- Hardey, M. (2008) 'The formation of social rules for digital interactions', *Information Communication and Society*, Vol. 11, No. 8, pp.1111-1131.
- Haythornthwaite, C., Bruce, B.C., Andrews, R., Kazmer, M.M., Montague, R.-A. and Preston, C. 2007. Theories and models of and for online learning. *First Monday*, Vol. 12, No. 8, available at <http://firstmonday.org/article/view/1976/1851>
- Janicik, G.A. and Bartel, C.A. (2003) 'Talking about time: Effects of temporal planning and time awareness norms on group coordination and performance', *Group Dynamics: Theory, Research, and Practice*, Vol. 7, No. 2, pp.122-134.

Author

- Kazmer, M.M. (2002) *Disengagement from Intrinsically Transient Social Worlds: The Case of a Distance Learning Community*. Ph.D. University of Illinois at Urbana-Champaign, Urbana, IL.
- Kazmer, M.M. (2005a) 'Community-Embedded Learning', *Library Quarterly*, Vol. 75, No. 2, pp.190-212.
- Kazmer, M.M. (2005b) Cats in the classroom: Online learning in hybrid space. *First Monday*, Vol. 10, No. 9, available at <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1278/1198>
- Kazmer, M.M. (2006) 'Creation and loss of sociotechnical capital among information professionals educated online', *Library and Information Science Research*, Vol. 28, No. 2, pp.172-191.
- Kazmer, M.M. (2007) 'Beyond C U L8R: Disengaging from online social worlds', *New Media and Society*, Vol. 9, No. 1, pp.111-138.
- Kazmer, M.M. (2010) 'Disengaging from a distributed research project: Refining a model of group departures', *Journal of the American Society for Information Science & Technology*, Vol. 61, No. 4, pp.758-771.
- Keyton, J. (1993) 'Group termination: Completing the study of group development', *Small Group Research*, Vol. 24, No. 1, pp.84-100.
- Kolko, B. and Reid, E. (1998) 'Dissolution and fragmentation: Problems in on-line communities', In: Jones, S.G. (ed.), *CyberSociety 2.0*, (pp.212-229), Thousand Oaks, CA: Sage.
- Lane, L.M. (2009) 'Insidious pedagogy: How course management systems impact teaching', *First Monday*, Vol. 14, No. 10, available at <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2530/2303>
- Merton, R.K. (1968) *Social theory and social structure*, New York: Free Press.
- Mutz, D.C. (2006) *Hearing the other side: Deliberative versus participatory democracy*, Cambridge, MA: Cambridge University Press.
- Nardi, B.A., Whittaker, S. and Schwarz, H. (2002) 'NetWORKers and their activity in intensional networks', *Computer Supported Cooperative Work*, Vol. 11, No. 1-2, pp.205-242.
- Resnick, P. (2002) 'Beyond bowling together: SocioTechnical capital', In: M.Carroll, J. (ed.), *Human-Computer Interaction in the new millennium*, (pp.647-672), Boston: Addison-Wesley.
- Ridings, C. and Wasko, M.M. (2010) 'Online discussion group sustainability: Investigating the interplay between structural dynamics and social dynamics over time', *Journal of the Association for Information Systems*, Vol. 11, No. 2, available at <http://aisel.aisnet.org/jais/vol11/iss2/1>
- Schlossberg, N.K. (1981) 'A model for analyzing human adaptation to transition', *Counseling Psychologist*, Vol. 9, No. 2, pp.2-18.
- Strauss, A. (1978) 'A Social World Perspective', *Studies in Symbolic interaction*, Vol. 1, pp.119-128.
- Strauss, A. (1985) 'Work and the division of labor', *The Sociological Quarterly*, Vol. 26, No. 1, pp.1-19.
- Strauss, A. (1988) 'The articulation of project work: An organization process', *Sociological Quarterly*, Vol. 29, No. 21988, pp.163-178.
- Strauss, A. and Corbin, J. (1998) *Basics of qualitative research: Techniques and procedures for developing grounded theory*, Thousand Oaks, CA: Sage.
- Tuckman, B. (1965) 'Developmental Sequence in Small Groups', *Psychological Bulletin*, Vol. 63, No. 6, pp.384-399.
- Tuckman, B.W. and Jensen, M.A.C. (1977) 'Stages of small-group development revisited', *Group and Organizational Studies*, Vol. 2, No. 4, pp.419-427.
- Wang, X. (2007) *An ecological perspective on online communities*. Ph.D. Dissertation. University of Pittsburgh, Pittsburgh, PA.
- Wekselberg, V., Goggin, W.C. and Collings, T.J. (1997) 'A multifaceted concept of group maturity and its measurement and relationship to group performance', *Small Group Research*, Vol. 28, No. 1, pp.3-28.

Title

- Wellman, B. and Gulia, M. (1999) 'Net Surfers Don't Ride Alone: Virtual Communities as Communities', *In: Smith, M. and Kollock, P. (eds.), Communities in Cyberspace*, (pp.167-194), London: Routledge.
- Wellman, B. and Haythornthwaite, C. eds., (2002) *The Internet in Everyday Life*. Oxford, England: Blackwell.
- Welser, H.T., Gleave, E., Fisher, D. and Smith, M. (2007) 'Visualizing the signatures of social roles in online discussion groups', *Journal of Social Structure*, Vol. 8, No. 2, available at <http://www.cmu.edu/joss/content/articles/volume8/Welser/>.
- Wheelan, S.A. (1996) 'An initial exploration of the relevance of complexity theory to group research and practice', *Systems Practice*, Vol. 9, No. 1, pp.49-70.
- Wheelan, S.A. and Williams, T. (2003) 'Mapping dynamic interaction patterns in work groups', *Small Group Research*, Vol. 34, No. 4, pp.443-467.
- Wojcieszak, M.E., Baek, Y.M. and Carpini, M.X.D. (2009) 'What is really going on?: Structure underlying face-to-face and online deliberation', *Information Communication and Society*, Vol. 12, No. 7, pp.1080-1102.
- Yuan, Y.C., Cosley, D., Welser, H.T., Xia, L. and Gay, G. (2009) 'The diffusion of a task recommendation system to facilitate contributions to an online community', *Journal of Computer-Mediated Communication*, Vol. 15, No. 1, pp.32-59.
- Zhao, S. and Elesh, D. (2008) 'Copresence as 'being with': Social contact in online public domains', *Information Communication and Society*, Vol. 11, No. 4, pp.565-583.

Figure 1. Model of disengaging.

Author

