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James Patrick Williams

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The Dissertation Committee for James Patrick Williams Certifies that this is the approved version of the following dissertation:

Social presence, interaction, and participation in asynchronous creative writing workshops

Committee:

Randolph G. Bias, Supervisor

Andrew Dillon

Philip Doty

Elizabeth Keating

Mary Lynn Rice-Lively

**Social presence, interaction, and participation in asynchronous creative
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by

James Patrick Williams, BA, MSIS

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Social presence, interaction, and participation in asynchronous creative writing workshops

James Patrick Williams, PhD

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Trends in user-generated content on the Web are shifting the role of online course materials, student work, and communications channels in instructional settings. Evidence of users' interaction with content has been brought into the foreground through interface elements which reflect and encourage interaction, including comments, ratings, tags, "likes", view statistics, and others. This research considers such features "interaction traces" and explores their use and interpretation by student learners. This research investigates the use and perception of these features by students within a particular type of asynchronous learning environment, the creative writing workshop. Within the two courses studied, a poetry course and a fiction course, two forms of interaction traces were presented: peer criticism posted as comments on creative work and visible view counts for all comments posted in the course. Informed by the Community of Inquiry framework and using a case study methodology, this dissertation investigates whether interaction traces affect perceptions of social presence among students and how students respond to this evidence of the interaction and critique. Data were collected from course discussion transcripts, course management system usage statistics, and participant responses to six surveys. Discussion thread transcripts were subjected to content analysis for indicators of social presence. Additionally, the researcher performed individual interviews with the

instructor and a subset of students. Analysis of participants' social presence, interaction with others, and participation in the class revealed evidence that peer criticism was mediated by social presence, that students engaged in a variety of individual relationships based on perceptions developed through interaction traces, and that participant reading and writing activities affected how they perceived the course and their peers. Social presence in comments served not only to humanize participants and to resolve conflict but led to confusion and frustration in some cases. The instructor's high level of social presence in the courses influenced participants and provided a model for some participants' approaches to coursework. Based on the themes which emerged from the case reports, this dissertation suggests some implications for online course planning and course management system design with regard to interaction traces.

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Chapter 1: Background

Interaction and interactivity have long been emphasized in online instruction as means of addressing the potentially isolating work of distance learning (Moore, 1989; Swan 2002; Picciano, 2002; Bouhnik & Marcus, 2006). Designers of online learning environments have employed a suite of computer-mediated communication (CMC) tools, including threaded discussion boards, chat rooms, collaborative workspaces, and others to accommodate student interaction (Kvavik, 2005; Rogers, 2004). Encouraging participation among students in course discussion has proven difficult for instructors, but many strategies have been developed to facilitate discussion (Hara, Bonk, and Angeli, 2000; Chen and Chiu, 2008; Suthers, et al., 2008) and to engage students in dialogue with their peers (Johnson, 2007).

On the World Wide Web, with its recent shift from a static source of information for most users toward a more dynamic and immersive social experience, user interaction and participation are increasingly visible trends. Web 2.0 tools enabling any user to create and share text, images, videos, and more with everyone else on the web have been developed and have flourished. Most visible among these tools for sharing are websites that facilitate interaction around what is shared and which place user-generated content within a social context. Popular sites like YouTube and Vimeo host user-submitted video content on pages that reveal information about how others have responded to videos, how often videos have been viewed, and how those videos are related to others.

With the rise to prominence of video sharing websites like YouTube and Vimeo, and photo sharing websites like Flickr, and social networking websites like Facebook, MySpace, and others, many users have become quite savvy in their interaction with media and text on the web. Comments, ratings, tags, usage statistics, and other evidence

of user interaction with web content have been brought into the foreground, through interface elements that reflect and encourage interaction. I've chosen to describe the various website features in this group "interaction traces." As these interaction traces accumulate around content on the web, they provide evidence of a flurry of interaction among content creators, users, and the content itself. Additionally, interaction traces surround that content in additional context, provide information about its use and users, and link it to content elsewhere on the web.

INTERACTION TRACES

Flickr is a good example of an environment in which interaction traces are in heavy use. Its interface includes many examples of the different types of information on use, classification, critique, popularity, and connections with and among the content and users that drive that site. Flickr is a photo sharing website that allows users to share their photos, comment on the photos of others, create and join groups of users with similar interests, contribute their photos to group photo pools, and subscribe and search for "photostreams" they find interesting. Some of this information can be considered evidence of active annotation and interaction; some more closely resembles the reporting of passive web traffic statistics. The commonality of this information is that it reflects users' interactions with each other and with content. The site's focus on user-generated content and social networking firmly root it within the Web 2.0 realm, and its social emphasis on grouping and finding like images is driven by the types of interaction traces discussed in this research. Users may tag their photos and the photos of others with keywords, they may comment on any image or place a textual note within an image, add images to their gallery of favorites, search by tag, description, or comment. Users are

made aware how popular and “interesting” particular photos are, how many times photos are accessed, and many other bits of metadata.

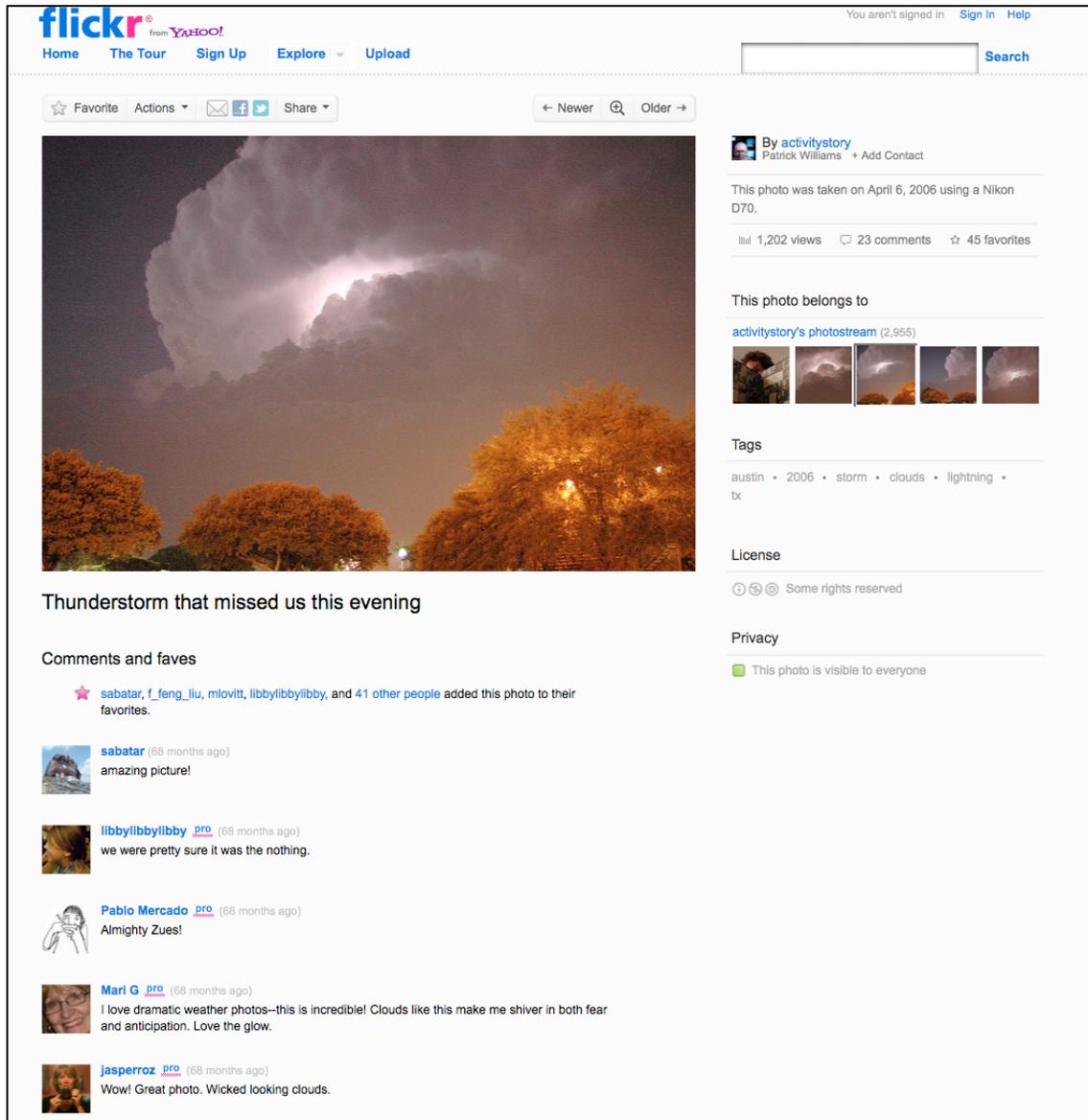


Figure 1. The Flickr page for a photograph posted by the researcher (2006).

The features employed by Flickr and various similar utilities create a range of interaction trace types, each with its own constraints, demands, and possible interpretations. All of these items connote a connection between the content, the author,

and the users. Online social media and networking tools apply these and other interaction traces in many different ways.

More and more, interaction traces are being employed by web sites not just as a means of describing content, but as a means of organizing it. In recent years, interaction traces have become visible as a leading organizational structure for user-submitted online content on a host of other websites as well. Reddit.com, a social news website which dubs itself “the front page of the internet,” invites users to vote for, comment on, and share links to news stories and web sites on the World Wide Web as well as pages created within the Reddit site on which users author original content. What content appears on the Reddit homepage is determined by the user community, and items are displayed with category tags, the number of comments associated with an item, and a score presented in between an up arrow and a down arrow, which users can click to “upvote” or “downvote” a particular piece of content. Ranking scores are calculated by subtracting the downvotes for an item from its total of upvotes (Conde Nast Digital, 2011) (to fight automated voting, however, the numbers of upvotes and downvotes, but not the actual score, are “fuzzed”). Items with the most upvotes during a particular period are floated to the top of the Reddit homepage, which features the top 25 items. The votes also affect the “karma” rating of users who make submissions, thus creating social capital from the popularity of items. Reddit also displays “controversial” items—those for which scores are low, reflective of near-equal downvotes and upvotes.

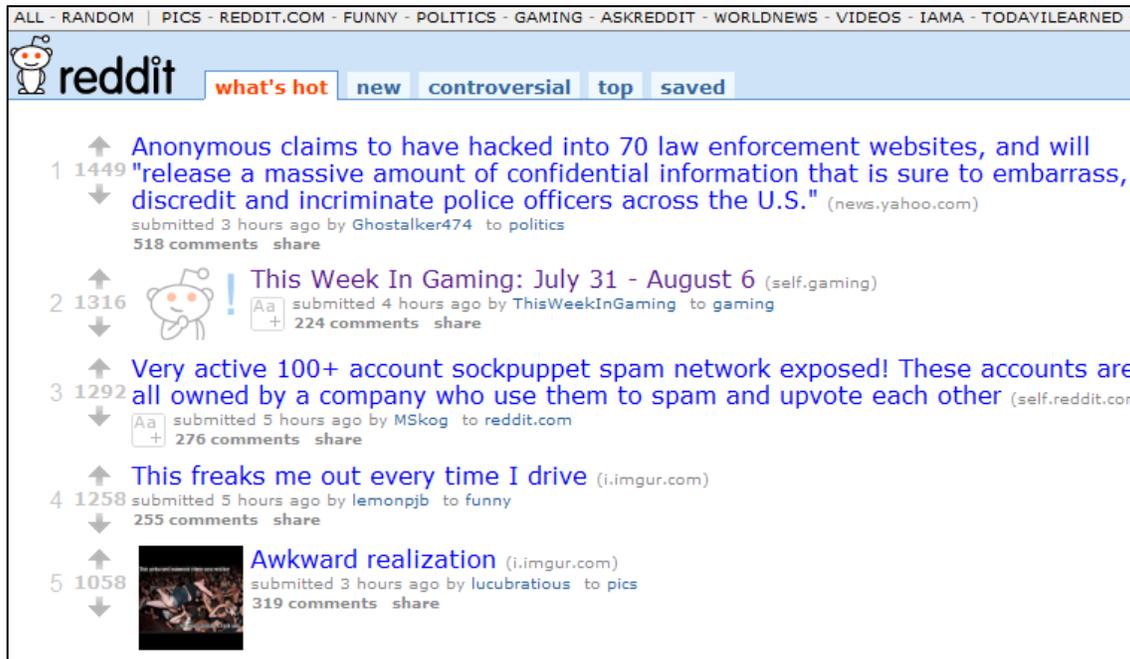


Figure 2: The Reddit Homepage

Youtube.com similarly employs interaction traces as a means of promoting or demoting user submitted content and comments. Comments that receive the most “thumbs up” ratings from users are removed from the chronological listing of comments and positioned in a “Top Comments” section. Furthermore, Youtube allows users to make at-replies (in the form of @username) so they may refer and converse directly with other users. Video responses, integrated into the text commenting section of the page, additionally reveal user interactions with the featured content.

Top Comments

Norman Watt-Roy...what a bass player!!!

matelot95 4 months ago 26 👍

1. there is good basslines
2. there is epic basslines
- 3 then there is the bassline from this song

synthpathetic 1 month ago 6 👍

Video Responses [see all](#)



Ian Dury - Girls Watching
by 0x51d
1,209 views



Defeat The Lion - dj Moshe Tal vir 3 - new.wmv
by moosh31
295 views

All Comments (592) [see all](#) Reactions (0)

Respond to this video...

Your reaction? ▼

In the wilds of BORNEOOOOO (with that deep voice)..Classic - Love it!!!
Great Bass by the way - funky slappin bass, they don't do it like that any ore.

Barboutzis 1 day ago

@matelot95 Too bloody right mate! I suppose it should be classed as a 'Blotheadonian' bass line!

8corporal 4 days ago

32 people have not been hit ;)

ASTMA193 5 days ago

Figure 3: Comments, “Top Comments,” and video responses to a YouTube video.

Even search engines like Google and Microsoft’s Bing have begun to foreground user interaction with their search results, allowing users to recommend particular results among groups of friends. This proliferation of interaction traces yields an opportunity

and creates a need for research to better understand their use and interpretation. Below are some of the items identified as interaction traces in this dissertation research, briefly explained.

Views – A count of the total number of times a piece of content has been accessed. Views provide an indication of the relative exposure a certain post, page, or item has received, generally posted without user-identifying information.

Ratings – Ratings are an indication of whether or not users like a particular piece of content. Usually anonymous, ratings provide an aggregate rating (usually on a scale of 1-5 stars) of the ratings users applied to a particular piece of content.

Favorites – A binary “thumbs-up” attached to a particular piece of content. Usually, the identity of users who have chosen the particular item as a favorite is exposed. Favorites are often used to “flag” a piece of content so it may be found later or to situate an item within a gallery of favorites.

Tags – Tags are terms that are attached to particular content to describe their meaning or relevance to other topics or items. The terms used in tags may be valuable to the group, or they may be unique to a single user’s understanding, employed to flag content for later use. Tags are intended to increase findability, but they also may summarize content.

Notes—Notes are in-line annotations on a piece of content; a region of an image, for example, with appended text.

Comments – Comments are in-line responses to content usually addressed to the piece of content’s author. These comments remain attached to a particular piece of content, are usually written by an identifiable author, and can provide an opportunity for discourse among users and content creators.

Each of these trace types involves a very different experience on the part of those who contribute. Page views require nothing of a user other than loading the page on which the content appears in their browser; a comment requires that a user personally respond to something in place; a tag places an artifact within someone else's organizational framework.

These interactive features, which are now routinely integrated into online social networks, media sharing websites, and collaborative web applications, have begun to make their way into the applications that support online learning, including course management systems like Blackboard. However, online learning environments are typically quite different than the collaborative web resources mentioned above.

COURSE MANAGEMENT SYSTEMS AND THE WORLD WIDE WEB

Course management systems have generally been designed from the perspective of the particular educational institution, the particular instructor, and for a specific semester—course websites are accessible only by the associated students and instructors, and are active only for a specific span of time; students' and instructors' identities are linked to their activity in the system; students and instructors have varying levels of power to affect the course environment; and activities are generally tied to specific instructional goals and outcomes.

The largely unchecked, uncontrolled, and sometimes anonymous accumulation of interaction traces around content on the open web is not supported in contemporary course management systems, which link users' activities to their identities for purposes of assessment and access control.

Additionally, for the most part, interaction traces on sites like Flickr, YouTube, and others tell the story of only those users who were compelled to interact—passive users of this content are not represented beyond, in some cases, merely being counted as one more person to view an image or video. Within a closed community of known individuals, as in an online course, both the volume of interaction and the number of participants is limited. Instructors’ and students’ interactions (or lack of interactions) with each other and with course content are apparent to all users. Furthermore, students and instructors may view levels of interaction traces around content in these closed environments in terms of assessment or as reflective of the quality of course content.

The growing use of technologies that expose learner interactions with course materials and with their co-learners provide an opportunity to investigate how interaction traces can affect learner experience and perception of others’ presence within the asynchronous learning environment.

Online courses attract a variety of traditional and non-traditional students, with differing exposure to and familiarity with the Internet and the associated technologies. Research on interaction traces in online learning is required to provide an understanding of how students perceive evidence of engagement, interaction, and critique occurring alongside content they have authored, how this perception might influence their subsequent behavior, and how these interaction traces can inform approaches to teaching online and the design of effective learning environments.

The presence and effects of Web 2.0 social tools in learning environments has begun to garner attention from researchers (e.g., Anderson, 2008), and this study will contribute an investigation of an overlooked type of online course, the creative writing workshop, to this growing body of research.

Chapter 2: Literature Review

This literature review covers research on methods of online annotation, studies of interaction and social presence in online courses, and research on students' participation (and the perception of participation) in asynchronous learning environments. Because these technologies and phenomena have been investigated by researchers in Information Studies, Education, Computer Science, Communication Studies, and other fields, a variety of perspectives and methodologies are presented.

Harasim (1989) saw the interactivity afforded by asynchronous CMC as “a unique domain” (p.50), due to its potential for more equitable participation, independence of time and place, and freedom from social cues that affect participation in face-to-face classes. Researchers in the last two decades have explored Harasim's notions and found that the promise of this new domain has yet to be fully realized due to a variety of barriers.

Though there have been some studies of other interactive tools within course management systems (Farmer, 2004; Deng & Yuen, 2007), discussion boards are often the only spaces available in asynchronous courses in which large-scale, visible group interaction can occur. The ubiquity of discussion boards within systems such as Blackboard, WebCT, and Angel, as well as the richness of data they provide, has positioned asynchronous discussion as a focus of study for research in student interaction on online courses.

In a 1989 editorial in the *American Journal of Distance Education*, Moore defined three types of interaction in distance education that have been used by researchers to investigate the interactivity of asynchronous online discussions—learner-content interaction, learner-instructor interaction, and learner-learner interaction. With this

definition, he sought to provide educators with an organizing principle for course design. Bouhnik and Marcus (2006) added learner-system interaction to this list to account for developments in the ways that distance courses have been delivered in subsequent years. This taxonomy presents a framework for locating interaction in asynchronous learning environments and for studying learner perceptions of all areas of an online course.

INTERACTION AND ANNOTATION

Technologies supporting annotations in various forms allow users to interact with content and engage in dialogue with other users of the World Wide Web, and online annotations have received considerable attention from researchers interested in reading and writing behavior in electronic environments. In the most general sense, the idea of interaction traces described above covers various types of active annotation and visible metadata that is either user-generated or describes user interaction with materials. Many forms of interaction traces (e.g., comments and tags) can be understood as annotations. This section of the paper focuses on research performed on the use and impact of annotations in learning environments.

Much of the literature on online annotation has been focused on the technologies that have been designed to support information sharing and collaboration through annotations to web resources. For example, Ovsianikov, et al. (1999) reviewed 17 prior annotation systems and propose their own with regard to 15 facets of annotation systems, including inline annotation, annotation as links, shared annotations, real-time synchronization, methods for storing annotations, and software implementation. Their design focused on providing the ability for users to search large sets of annotations, but did not investigate how users responded to these systems. Glover, Xu, and Hardaker

(2007), in their discussion of annotation technologies in the educational context, examined another eight annotation technologies developed since 1999, also presenting their own system and concluding that integration with course management systems and the discussion boards they feature would be beneficial. While these reviews are helpful in their classification of the types and features that would be useful in ideal annotation systems, the variety of standalone tools being developed and the scale at which they seek to address annotating web content is troubling. In the conclusion to Wolfe's (2002) review of annotation research and technology, the author lamented the short lifespan, the unsustainable funding models, and the intellectual property problems that had plagued various prior annotation systems. In the time these technologies examined in these three reviews were developed, many web sites, web applications, and other online resources have been developed to enable, reflect, and encourage annotation and sharing of material at the site-level (rather than providing a single annotation sharing framework across the entire World Wide Web). Popular sites like Flickr, YouTube, and others have made various modes of annotation, including comments, in-line notes, and tags, available and searchable across their entire sites. On these sites, annotations generally appear at what Roscheisen and Winograd (1995) described as "whole-document attachment" level, rather than in-line with the content of documents, though some support is available for inline annotations (notes added to regions in images on Flickr, or time-based annotations within videos on YouTube).

With the assistance of such innovations as tags, comments, and in-line notes, as well as the exposure of more interaction types on the Web, the social artifice of online learning can be more frequently and effectively uncovered. As the "more iterative and interactive" (Morville, 2005, p. 60) qualities of contemporary social applications on the Web move into learning environments, learners are presented with the opportunity to

actively engage in the organization, classification, critique, and description of objects in the online learning environment.

Researchers have begun studying how aspects of these social sites, like Flickr, Facebook, and YouTube and other Web 2.0 technologies can be employed in online courses (Boulos and Wheeler, 2007; Koutrika, et al., 2009). Additionally, much attention has been given to the behaviors of users engaged in tagging (Marlow, et al, 2006; Golder and Huberman, 2006; Farooq, et al; 2007), friending (Lange, 2008), displays of rankings and other user activity (Deiml-Sebt, Pschetz, and Muller, 2009); and other modes social annotation (Han & Yan, 2009) within non-instructional online communities. Some researchers have recently looked specifically at annotation in online learning environments (Wentling, Park, and Peiper, 2007; Yeh and Lo, 2009), but the annotation-like user behaviors enabled and exhibited in non-instructional environments require more study within online learning environments for the potential for these tools to enhance learning to be fully understood.

Despite this fact, previous research on annotations, collaboration, and learning are helpful in conceptualizing how interaction traces may affect learners in asynchronous learning environments.

Marshall's (1997, 1998, Golivchinsky and Marshall, 2000) work on annotation of both print and digital documents examines the effects of annotations on the active reading of course content, and the differences between personal and public annotations in digital libraries. In her 1997 ethnographic study of student markings in used textbooks, she noted that personal annotations can span from clear, identifiable notes connected to particular passages in a text to fluid and informal markings that may only be meaningful to the one making the mark. Additionally, she suggested the need for “seamless transitions between public and private forms of writing and the ability to request

annotated versions of electronic materials—choose among them or remove them—may help some positive aspects” of the markings in annotated textbooks (p. 140). The later work focused on individuals reading electronic works of fiction, noting that “hypertext fiction affords greater experimentation” than its counterparts. The distinction between creative and informational works is useful in the context of this dissertation.

Marshall and Brush’s further investigations of the relationship between public and private annotations (2004) found that the majority of annotations to documents were specifically for personal use (and perhaps later re-use); only 10 percent of annotations in their study were made public, and when they were, they were heavily modified for shared use. These studies reveal interesting aspects of how students think about how they interact with course content and how those interactions are expressed to other learners and instructors.

Researchers have also investigated the role user annotations play in identifying useful passages of documents and eBooks (Shipman, et al., 2003), how annotation systems might enhance instructors’ ability to markup and assess student writing (Plimmer and Mason, 2006), as an expression of group sense making (Kennedy, et al., 2007), to guide collaboration among larger, asynchronous, or geographically distributed groups of users (Wentling, Park, and Peiper, 2007), and in second language acquisition (Chun and Plass, 1996; Yeh and Lo, 2009).

Primarily, researchers have been interested in the tools that enable annotation and how annotations can be used to understand the ways in which students interact with course content or instructors. Studies have less frequently investigated the social context of the annotations—how the annotations situate learners among content, how they represent learner-learner interactions, and how they contribute to learners’ perceptions of one another. Additionally, researchers are most often focused on individual, canonical

documents rather than on student-created content at the course level. As afforded by interaction traces and as practiced on social media and social networking sites, the content available for annotation is increasingly user-generated; study is needed to determine the effects of annotation and other interaction traces attached to learner-produced content in online courses.

Wolfe (2000) investigated annotations as evidence of student understanding of particular documents, beginning to approach the social and cognitive impacts of annotation. She wondered whether “the reminder that others share the text might have a communal effect, encouraging individual readers to see themselves as part of a public composed of former readers” (p. 19). Her study analyzed questionnaire data collected from 123 students who participated in an essay assignment responding to a text (on paper) annotated in different ways. The post-writing questionnaire included items to measure students’ recall of the annotations, the effect of those annotations on their own interpretations of the text, and what effect the annotations had on student perception of the annotations’ author. Wolfe found that the annotations on the source document did influence user perception of the content of that document, and that information about the annotation’s location, information regarding the annotation’s relationship with the text, and information about the annotator contributed to student perception of a work (p. 25). Though this study took place in a face-to-face learning environment, it is interesting because it shows that evidence of interaction by others with the text had an effect not only on how those texts were interpreted by students but also on how students viewed the person responsible for the annotations.

Brush, et al. (2002) compared two tools to support discussion of technical papers in a graduate human-computer interaction course with 11 students. One of the tools allowed for the discussion board to be viewed simultaneously with the paper being

discussed, supporting in-line annotations to the text. The other discussion tool supported threaded discussion, where a separate discussion forum was created to support discussion of each paper at the whole-document level. The students used both of the tools, alternating between them on a weekly basis. Students were required to post summaries of articles and their personal responses. They were additionally required to respond to one another's messages. Data were collected in the form of weekly surveys and post-class interviews with eight of the students. The researchers found that activity was substantially higher in the tool allowing in-line annotations, despite their assumptions that it would have led to shorter responses and less participation. The researchers claimed that "the two systems support two different types of discussion" (p. 429) which they label general (supported by the threaded discussion tool) and specific (supported by the anchored annotation and discussion tool). These distinctions made by the researchers seem to be based only on qualitative student responses. Although the researchers reported that discussions were archived, analysis of the discussion transcripts is not included. Despite the small number of students involved and the lack of rich analysis of the actual activity that took place within each system, this paper contributes some interesting implications for the current literature review. First, their study considered threaded discussion within the realm of annotations, comparing inline and whole-document level annotation of texts. Additionally, the researchers found that the in-line annotation and discussion tool, which led to lengthier discussions, contributed to information overload in students—even in a class of such small size. Finally, Brush, et al. echoed Wolfe's (2002) assertion that access to annotation systems posed a problem for users—both systems offered in this class offered unstable access to many of the students because they existed outside the traditional software environments in use.

Another study of learner behavior with annotations was conducted by Hwang, Wang, and Sharples (2007). In their study of 70 graduate students in two sections of a Multimedia Applications course, several annotation conditions were presented to students in an experimental class (n=38) and compared to a control class not provided access to the annotation tool. The annotation sharing scenarios in the experimental class included individual annotation without sharing, annotation sharing among small groups, and annotation sharing among the entire experimental class. Data were collected from pre- and post-test assessments of prior knowledge, content of annotations, data from server logs, assessment of student cognitive styles, and a questionnaire addressing student attitudes to the annotation tool. The researchers found that students in the experimental class received significantly higher scores on the post-test (while pre-test scores between the groups showed no significant difference), leading the researchers to the conclusion that shared annotations among small groups helped students in terms of academic achievement. Within the experimental group, the higher-scoring students on the post-test also showed a higher quantity of annotations than did the lower-scoring students. The correlation of learning achievement and quantity of annotation in the full-class sharing scenario was not as strong, leading the researchers to the conclusion that access to a wider array of annotations reduces learners' motivation to create their own. Through an analysis of the questionnaire responses, the researchers found that students had positive attitudes towards the usefulness, ease of use, and their satisfaction with the tool. One problem with this study is that it focused on frequency of annotation without regard to the content or context of the annotations; though such information was reported to have been collected, it was apparently not used in the analysis reported in this article. Additionally, as with many of the studies addressed in this literature review, this study focuses on the behaviors of high-level students in a course covering technology-oriented content, so the

findings may not speak to situations of lower-level, general content, or creative course-work.

This research shows that annotations, in various forms, affect the experience of learners. Annotations can motivate, influence, and represent learners' interaction with course content, as well as social interaction among other learners.

Marshall (1998) and Agosti and Ferro (2007) made distinctions between informal and formal annotations, or content and metadata annotations, respectively. The informal or content realm of annotations includes marginalia, comments, or notes taken; the formal or metadata category includes more passively-generated information like system classification data or usage information. Many researchers have focused on the informal and content realm (i.e., the majority of the studies covered in this review), but few studies have sought to measure the effects of the informal or metadata end of the spectrum. Comparison between these categories of annotation, within which the various types of interaction traces can be placed, is required to understand how their inclusion in online learning environments affects learners.

This review seeks to provide background for an investigation of how annotations have been studied as a means of informing an approach to investigating how interaction traces reflect and influence the social processes of online learning environments. The vast majority of the literature focuses on annotations to course content such as readings or videos that were not produced within the course—journal articles, textbooks, and other materials that the instructor has assigned to students. There is a gap in the research regarding the impact on student perception of annotation on materials created by students in educational contexts.

INTERACTION, PARTICIPATION, AND PRESENCE IN ONLINE COURSES

Researchers in distance learning have long held that interaction is a key feature of successful online courses (Harasim, 1989; LaVooy & Newlin 2003; Lapidat, 2006; Juwah, 2006). As a means of understanding the effects of interaction in asynchronous learning environments, researchers have investigated the concept of presence—both actual and perceived—in such environments (Gunawaradena, 1995; Rourke, Anderson, Garrison, and Archer, 1999; Richardson and Swan, 2004; Russo and Campbell, 2004; Garrison and Cleveland-Innes, 2005; Hughes, Ventura, and Dando, 2007; Yamada, 2009). Others have sought to define, understand, and encourage learner participation in asynchronous learning networks (Chan, Chow, and Cheung, 2004; Miller, Ranier, and Corley, 2003; Caspi, Chajut, and Saporta, 2008; Hew and Cheung, 2008; Hamuy and Galaz, 2010). Annotations were described previously as one form of evidence that interaction is occurring in online learning environments; this section of the paper will cover research conducted in the past two decades on interaction and presence with regard to asynchronous online discussion.

Interaction and Presence

Henri (1992) published an influential article on CMC in asynchronous learning environments that established a model of content analysis for measuring student interaction and participation. She noted that “it is not sufficient merely to count the number of messages” students post when researchers attempt to “give an accurate picture of student participation” (p. 124). Such data can be useful, she held, but only when placed in context with data regarding message content. She defined five dimensions designed to “pertain to the work of the educator in dealing with a group of distance learners” and to be specifically sensitive to the learning processes taking place in an asynchronous

discussion. These dimensions are participative, social, interactive, cognitive, and metacognitive. This model has been used, adapted, and expanded by many researchers since it was developed (Rourke, et al. 1999; Hara, Bonk, and Angeli, 2000; Garrison, Anderson, and Archer, 2001; Strijbos, Martens, and Prins, 2006). Henri (1991) noted that “[m]ost authors equate the interactive process with participation: when they report on an experiment in training with CMC, they imply that to measure interaction is to measure participation” (p.150). Working toward making the distinction more clear, she conducted this study of 11 adult learners, employing her content analysis approach, to measure levels of interaction in asynchronous discussion transcripts. Drawing on a definition of interaction developed by Bretz (1983) to describe interaction in artificial intelligence, Henri’s model of interaction distinguishes two types of messages in asynchronous discussion—interactive messages, which make either explicit or implicit mention of the messages or ideas of other learners—and independent messages, which may or may not relate to the content of the discussion but do not represent connections among other messages. This analytical model allowed Henri to code each message (the unit of analysis in this study) in the discussion and to map independent and interactive messages graphically in communicograms (Figure 4).

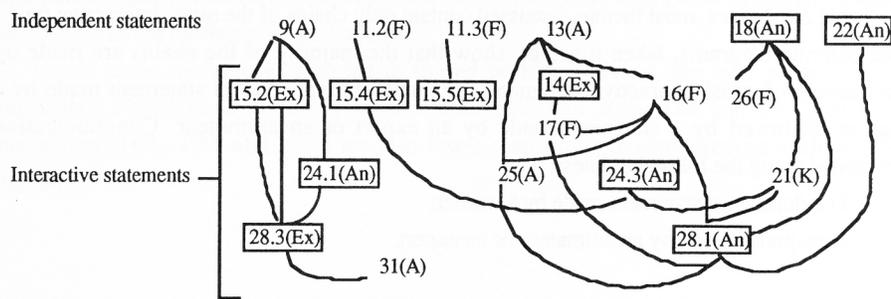


Figure 4. Example of a communicogram, from Henri (1991), p. 156.

Analysis revealed that only one-third of messages posted by learners were coded as interactive. However, maps of message interactivity showed that many of the messages coded as independent statements led to interaction in subsequent messages. This particular study is interesting in its exploratory nature—while learners were not engaged in a specific collaborative task (a trapping of most subsequent similar studies), Henri concluded that if “the learner wishes to reach personal objectives, CMC does ... allow him to obtain some support” from the other learners (p. 150). This implies that instructor prompts, artificial collaborative tasks, compulsory posting, and other methods of enforced interaction may not be an instructor’s only tools—that, if students are personally motivated to reach certain outcomes, they will participate and interact to the degree they need. Furthermore, interviews revealed that learners in this study valued reading the messages of others (and not necessarily responding) as second only to reading course material in its importance to their learning. As Henri’s approach was further developed through subsequent research, student outcomes have been addressed and compared to results of content analysis. This early study’s identification of learners’ independent statements as being both reflective and foundational for subsequent interactivity relate to the research questions in this dissertation.

Gunawaradena (1995) reviewed social presence research as it applies to interaction and learning in both face-to-face and CMC-enabled environments. In her article, social presence is defined as the degree to which a person is perceived as “real,” drawing on Short, Williams, and Christie’s (1976) treatment of social presence as an attribute of telecommunications systems. Short, Williams, and Christie conceptualized social presence as a single dimension of a system perceived by users and measured on a bipolar scale of personal to impersonal. Gunawaradena argued that while certain levels of

social presence may be afforded by a system's design, that studies have shown that social behavior is also influenced by learners' perception of others' use of the system. Gunawaradena tested this in a 1997 study.

Reflecting Harasim's (1989) assertion that CMC in instructional settings enhances learners' ability to interact with one another, Gunawaradena and Zittel (1997) investigated the effects of social presence on student satisfaction in an online learning environment. Recognizing that CMC learning environments enable group-based learning (facilitated by an instructor, but not necessarily *led* by one), the researchers sought to measure social presence as "participants' reactions to other participants and activities within the group, rather than a classroom's reactions to the teacher's social presence" (p. 11). They studied groups of graduate students from five universities. After a semester of work with a computer-mediated asynchronous conferencing tool, study participants completed a 61-item questionnaire designed to gather information on their perceptions of social presence, their active participation in the conference, their attitude toward CMC, barriers to their access of the tool, confidence in using CMC, adequacy of CMC training on their campus, their technical skills, and their satisfaction with the tool. Regression analysis of the questionnaire responses revealed social presence as a predictor of student satisfaction. The researchers also found that students reporting higher levels of social presence used emoticons and other written forms of emotional expression to substitute for non-verbal cues in the discussion board. Gunawaradena and Zittel's (1997) study was the first to measure the effects of social presence on learner satisfaction. It is also important for this dissertation research because it sought to uncover students' perception of self-efficacy and confidence with CMC in the social context. While this study relies solely on the post-facto reflections of students, it has been influential in later work which included additional research methods.

Garrison, Anderson, and Archer (1999) proposed the Community of Inquiry framework to identify evidence of interaction in asynchronous discussion transcripts rather than relying on survey responses. This model identifies three overlapping concepts: cognitive presence, teaching presence, and social presence, which converge to create successful educational experiences in CMC learning environments. The Community of Inquiry described in the framework includes students and instructors and assumes that learning takes place in interactions among the model's three elements.

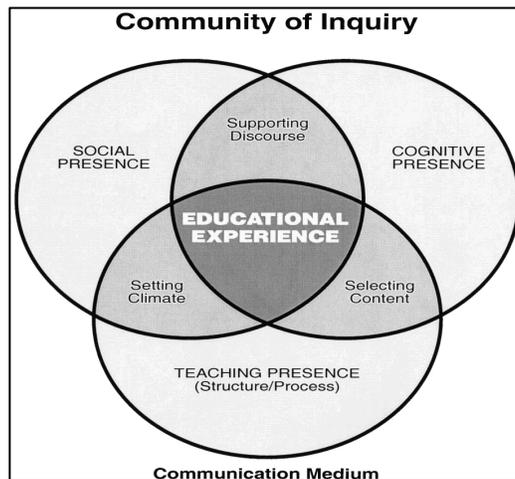


Figure 5. Community of Inquiry Framework (Garrison, Anderson, and Archer, 1999, p. 88)

Cognitive presence in this model is defined as “the extent to which the participants in any particular configuration of a community of inquiry are able to construct meaning through sustained communication” (p. 89). This element of the model is most closely tied to course content. Social presence refers to “the ability of participants in a community of inquiry to project themselves socially and emotionally” (p. 93). Like Gunawardena, the authors stated that this is a departure from prior researchers’

assumptions that the media or tool in use solely defines and constrains the social presence of its users. Instead, Garrison, Anderson, and Archer proposed, the social context within which learners interact in CMC learning environments is based on “familiarity, skills, motivation, organizational commitment, activities, and length of time in using the media” (p. 95). Teaching presence, the third element of the model, is described by the authors as necessary for providing structure and encouraging the development of the other two elements. The definitions of social presence and teaching presence draw from Mehrabian’s (1971) concept of immediacy, extending the non-verbal gestures and verbal moves of closeness into the online realm.

The model has its theoretical roots in Garrison’s (1991) earlier work, the work of Lipman (1991) (who also used the term “Community of Inquiry”), as well as the work of other theorists. A more detailed discussion of this model’s theoretical influences is presented in the next chapter.

In 1999 and 2001, three influential and related studies (Rourke, et al., 1999; Garrison, et al., 2001; Anderson, et al., 2001) were conducted to investigate and validate the Community of Inquiry framework using content analysis.

The first of these studies, Rourke, Anderson, Garrison, and Archer (1999), is treated in detail here due to its focus on the social presence aspect of the Community of Inquiry framework and its particular relevance to this dissertation. Informed by Gunawardena and Zittel (1997), the work of Rourke, et al. (1999) represents a more complex model for analyzing the interaction level of discussion postings with specific regard to social presence. Moving beyond the binary interactive/independent model of Henri (1991), they split independent responses into two categories: *affective responses* (e.g., expression of emotion, humor, self-disclosure) and *cohesive responses* (e.g., addressing participants by name, inclusive pronouns, salutations). Their definition of

interactive responses (e.g., continuing a thread, quoting, referring, asking questions, agreeing, appreciating), includes both implicit and explicit interaction as outlined in Henri's approach. The researchers studied two 13-week online graduate courses. Each course included discussion assignments lasting one week, and the researchers selected a single week's transcript from each class for analysis. As a unit of analysis, the researchers chose thematic segments of text appearing within messages, rather than the complete message unit that Gunawardena and Zittel (1997) chose. These segments were coded using the three social presence categories of interactive, affective, and cohesive. The index for their coding decisions is included below (figure 6).

<i>Category</i>	<i>Indicators</i>	<i>Definition</i>	<i>Example</i>
<i>Affective</i>	Expression of emotions	Conventional expressions of emotion, or unconventional expressions of emotion, includes repetitious punctuation, conspicuous capitalization, emoticons.	"I just can't stand it when ...!!!!" "ANYBODY OUT THERE!"
	Use of humor	Teasing, cajoling, irony, understatements, sarcasm.	The banana crop in Edmonton is looking good this year)
	Self-disclosure	Presents details of life outside of class, or expresses vulnerability.	"Where I work, this is what we do ..." "I just don't understand this question"
<i>Interactive</i>	Continuing a thread	Using reply feature of software, rather than starting a new thread.	Software dependent, e.g., "Subject: Re" or "Branch from"
	Quoting from others' messages	Using software features to quote others entire message or cutting and pasting selections of others' messages.	Software dependent, e.g., "Martha writes:" or text prefaced by less-than symbol <.
	Referring explicitly to others' messages	Direct references to contents of others' posts.	"In your message, you talked about Moore's distinction between ..."
	Asking questions	Students ask questions of other students or the moderator.	"Anyone else had experience with WEBCT?"
	Complimenting, expressing appreciation Expressing agreement	Complimenting others or contents of others' messages. Expressing agreement with others or content of others' messages.	"I really like your interpretation of the reading" "I was thinking the same thing. You really hit the nail on the head."
<i>Cohesive</i>	Vocatives	Addressing or referring to participants by name.	"I think John made a good point." "John, what do you think?"
	Addresses or refers to the group using inclusive pronouns	Addresses the group as <i>we</i> , <i>us</i> , <i>our</i> , <i>group</i> .	"Our textbook refers to ..." "I think we veered off track ..."
	Phatics, salutations	Communication that serves a purely social function; greetings, closures.	"Hi all" "That's it for now" "We're having the most beautiful weather here"

Figure 6. Social Presence Coding Template for Content Analysis (Rourke, et al., 1999, table 1).

Three researchers participated in the coding of the transcripts, engaging in dialogue about the process as it progressed. Inter-rater reliability was calculated using Holsti's coefficient of reliability, reporting aggregate reliability ratings of one transcript at 0.95 and at 0.91 for the other. Within the individual coding categories, there was inconsistent divergence among coders. For example, the manifest variables, such as invoking of other learner's first names, received a reliability rating of 1.0, but some of the latent variables, which required more complicated interpretations on the part of coders, had much lower ratings. The authors note that indications of humor had garnered an inter-rater reliability score of 0.25.

Using the template included above (figure 6), the researchers coded each transcript and calculated the social density for each (number of instances of social presence divided by the total number of words in the transcript). Density scores for the two transcripts were 22.83 (transcript A) and 33.54 (transcript B). The researchers report that transcript A had 2.5 times more indicators of social presence, but that that transcript also contained more and lengthier messages despite the relatively similar numbers of students participating. The higher density rating for transcript B confirmed the researchers "intuitive impressions that [they] formed while reading the transcripts" (Discussion section), offering some face validity to their findings. The researchers also noted that transcript B had a higher density of ratings for most individual categories of indicators, but not for salutations, compliments, and transcript quotes. The authors suggested that this might be due to stronger bonds among these students (and thus fewer pleasantries or superficial expressions), which they supported with an oblique allusion to student comments not reported in the study. However, they offered no explanation for this difference between the two classes—transcript B was taken from the sixth week of

one class, while transcript A was taken from the fifth week of another class, but no other information regarding potential differences is discussed.

The Rourke et al. (1999) study was intended to test a new content analysis framework for asynchronous discussion transcripts. While it could have been strengthened by deeper analysis of the data collected (i.e., extending analysis beyond social presence density) and comparison of other data sources, it is successful in providing a guide to researchers interested in evidence of social presence within such transcripts.

The next two studies in this series, Garrison, et al. (2001) and Anderson, et al. (2001), offer some insights for the current dissertation both as an extension of the Community of Inquiry framework as well as some methodological considerations. Garrison, et al. (2001) investigated cognitive presence in asynchronous computer conferencing with a similar design. However, their study focused on indicators of critical thinking and its related cognitive processes as expressed in the discussion transcript. Methodologically, this study differed a bit from Rourke, et al. (1999); the researchers used individual message as the unit of analysis, employed only two coders, and included Cohen's kappa (along with Holsti's coefficient) in their assessment of inter-rater reliability. Apart from its formal and therefore more consistently identifiable unit of analysis, the researchers further justified their decision to code whole messages because they are participant-defined: "The message as unit is also attractive because the length and content of the message is decided upon by its author rather than the coders" (p. 17).

Additionally, this study examined multiple weekly transcripts from a single course, thus allowing for changes in cognitive presence levels to be revealed.

Interestingly, the inter-rater reliability scores reported in this study are much lower than in the previous study. The researchers discuss that this might be due to the

challenge of consistently identifying the latent phases of critical thinking in the transcripts (rather than the manifest indicators in the previous study), supporting that a more specific coding template is necessary for indicators which demand interpretation of context (as with humor in the Rourke, et al. 1999 study).

Anderson, et al. (2001) employed a similar approach to assessing presence, this time it was teaching presence, in asynchronous discussion within a health course and an education course. Their study also used a message-level unit of analysis but relied only on Cohen's kappa for assessment of inter-rater reliability (scores for the two courses were $k=0.77$ and $k=0.84$). Additionally, this study compared two courses, and the content analysis included all transcripts from the entire 13-week session of each. To account for the fact that a particular message might contain more than one type of indicator, messages were coded as having or not having the various indicator of teaching presence. The researchers found significant differences in teaching presence density between the two classes. The health class included more messages from the teacher, but relatively fewer indicators of teaching presence. The researchers analyzed only messages posted by instructors in the course, noting that, in one of the courses, students took on instructor-like moderation roles (thus accounting for the lower number of posts from that instructor). Later researchers (An, Shin, and Lim, 2009) found that instructor participation can have both motivating and chilling effects on student engagement in asynchronous discussion. The flexibility of students to fill guiding roles is promising for the creative writing workshop format where peer review is emphasized.

In a large-scale survey of 73 online courses, Swan (2001) identified interaction with instructors and active discussion among participants as general factors contributing to students' perceptions of learning. This study also considered and compared the design of the 73 courses within which surveyed students were enrolled. Swan found that

students' perceptions of frequencies of interaction were consistent with reality, but she did not investigate the content of messages that were deemed examples of interaction. In a later study, Richardson and Swan (2004) surveyed 97 undergraduate students at the end of a semester of fully-online study. This correlational study compared students' survey reports of perceived social presence, demographic variables, and satisfaction regarding their learning and their instructor's performance. The researchers found a significant relationship between perceived social presence and perceived learning. Additionally, they concluded that their study provides "indirect support for the notion that social presence is in some sense cultured" (p. 77), suggesting, once again, that there is more at play in perception of social presence than merely what the CMC system affords. The surveys also included open-ended questions, which revealed that students valued the discussion board activities second only to written assignments in terms what they felt were the most beneficial features of the course. While these findings support the importance of social presence for student satisfaction with their instructors and courses, it is unclear how many different online courses and instructional designs were represented by the survey respondents. Had this survey considered the design of the learning environments in which participants worked, as in Swan's earlier studies, this importance of this study would have increased.

In an earlier content analysis study regarding frequency of social cues in asynchronous discussion in a graduate education course, Hara, Bonk, and Angeli (2000) found that, while messages including social cues and task-based content were posted separately early in the semester, as the class progressed, there were fewer indications of social cues. They noted that students' use of language was less formal later in the class and social cues, when present, tended to be embedded within messages addressing course content. This supports the conclusion that behaviors are influenced by the interactions

students observe in the conference, not merely what is afforded by the interface. In the course studied by Hara, Bonk, and Angeli, employed a “starter-wrapper” approach to discussion forums. In this approach, a different student introduced the topic of discussion at the beginning of each week and summarized the discussion at the week’s end. During a week in which the formal “starter-wrapper” structure was not employed (due to a student dropping the class) students interacted at lower levels. This finding, the researchers note, is contrary to prior finding by Ahern, et al. (1992) that informality led to greater interaction. In order to visualize interrelationships among students’ discussion postings and the effectiveness of the “starter-wrapper” technique, the researchers used message maps (figure 5) very similar to the communicograms employed by Henri (1991). As in Henri’s work these diagrams complement aggregate data in locating where interaction took place.

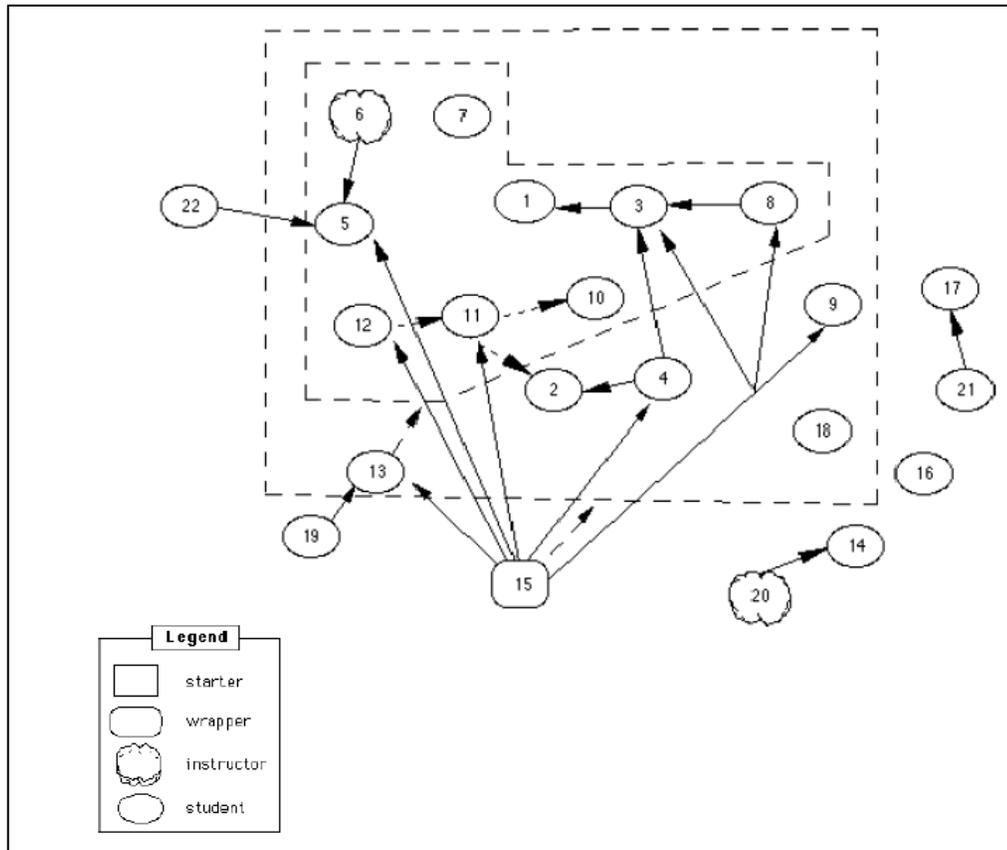


Figure 7. Conference activity graph from Hara, Bonk, and Angeli (2000), p. 131.

In another study, Rourke and Anderson (2002) investigated student perceptions of social presence through a survey which included open-ended questions. While the survey data showed evidence that students felt that social communication in the online environment was “friendly, warm, and trusting” (p. 269), the narrative responses to their open-ended questions revealed that, for some students, the environment created by this highly affective communication style impeded their motivation to participate. For these students, an increase in their peers’ social presence decreased the value they perceived in asynchronous discussion in a course. Rourke and Anderson’s study also echoes findings from Hara, Bonk, and Angeli’s (2000) study mentioned earlier, who noted that a lack of

time for reading messages can contribute to less interaction within a discussion board. It follows that, when this limited time is devoted to reading messages that may have no clear bearing on course outcomes, some students would react negatively.

Stacey (2002) returned to Garrison, Anderson, and Archer's (1999) Community of Inquiry definition of social presence for her investigation of collaboration in graduate online classes. Data analysis in this mixed-method study consisted of qualitative responses from students and content analysis of the discussion transcripts. In her analysis, Stacey found that the teacher effectively modeled social presence for the students and played a role in getting students to project themselves into the online environment. This finding seems to support the dependent relationship of social presence on teaching presence in the Community of Inquiry framework. However, Stacey found that high social presence was maintained throughout the course, which, she noted, conflicts with the wane in social presence observed by Rourke, et al. (1999) and others.

Lobry de Bruyn (2004) studied asynchronous online discussions in a blended course in Land Evaluation and Land Degradation over two academic years. The classes (n=25 and n=30) consisted of students in differing degree programs, of differing ages, and living on and off campus. Materials for the course were provided both online and in print. The study focused on convergent processes (which Lobry de Bruyn defines as "degree of analysis, synthesis, and summarizing" [p. 72]) occurring among students and levels of social presence evident in their interactions during an inquiry-based collaborative assignment. Lobry de Bruyn evaluated the discussion board transcript and, designating the individual message as the unit of analysis, performed content analysis based on schemes developed by Stacey (2002) and Rourke, et al. (1999) for identifying instances of social presence. She additionally employed a scheme developed by Hewitt (2001) to identify convergent behavior. Individual postings were coded in multiple

categories depending on the number of different content types they included. If a particular message included both affective (regarding student feelings and attitudes) and interactive responses (mentions of other students' postings in the discussion), that message was coded in both categories.

The findings of Lobry de Bruyn's study indicated that over 50% of all student message postings included at least one indicator of social presence. The majority of postings over the two years were coded as cognitive (96.5%) or interactive (60%), and with much lower means for cohesive and affective responses. This implies that students were more focused on the content of the class than the building of community with their peers. However, the number of postings upon which this content analysis was based was relatively small (n=37 and n=48, respectively in 2001 and 2002), and represents postings submitted by only a subset of students enrolled in the class. Use of the discussion board for this assignment was not compulsory and did not have an impact on the students' final grades. This study fails to address non-posting behavior of students, though Lobry de Bruyn does note that it appeared that students were more likely to read and respond to the most recent message rather than to the discussion thread as a whole. The inquiry-based learning assignment featured in this study lasted only a short portion of the semester, which may have helped to orient students' priorities toward completing their assignments rather than providing and seeking social support to and from their peers. In this study, Lobry de Bruyn did not collect information from students regarding their own interpretations of social presence in the discussion environment.

In a mixed-methods study consisting of online surveys and semi-structured interviews, Russo and Campbell (2004) found that students identified behaviors among their peers in an asynchronous online course that influenced their perception of peer presences. Additionally, they found students much more aware of the instructors'

presence than that of their peers. Study participants included half of the students in the course (n=31). Participants completed a demographic survey at the beginning of the class and a survey designed to assess their perceptions of presence half-way through the class. After the class had ended, some participants were interviewed by telephone and email for additional data collection. Russo and Campbell found that students perceived their instructor as having a higher level of presence than their peers, and, interestingly, that participants placed themselves at the lowest level of presence. Through interviews, the researchers identified the behaviors contributing to student perceptions of presence: frequency of interaction, responsiveness, message style/tone, non-verbal channels (the instructor's image or voice in course materials). This study is helpful because it reveals that students saw a difference among their participation levels and those of the others involved in the online class. However, the study fails to assess the actual activity within the class environment to contrast student perceptions.

An, Shin, and Lim (2009) investigated learner reactions to different types of instructor facilitation in three online educational technology courses. Using a mixed-method approach comprised of quantitative analysis of class posting history, social network analysis, and content analysis, they found that instructors' posting behavior could both facilitate and stall student interaction. This study, along with Russo and Campbell's, support Garrison, Anderson, and Archer's (1999) assertion that teaching presence and social presence are distinct and perceived by students in different ways.

Shea, et al. (2010) further investigated instructors' teaching presence and social presence in two online courses that were identical in content and design, but involved different instructional approaches to facilitation of learning in the discussion portion of the class. This research sought to investigate which type of the instructor's presence affected student perception of social presence. Shea, et al. noted differences in levels of

teaching and social presences correspond with different points in the course, and found that excluding data from the initial course module, “in which students and the instructor are still tentatively determining roles relative to one another,” allowed for similarities among the subsequent modules to emerge. The researchers identified a strong correlation among instructor social presence and student social presence in the course with a more active instructor ($r=.98$) in the later course modules, and in the course with the less-active instructor, a weaker correlation (from $r=.80$ to $r=.38$) is the result of removing the first module (which contains a higher concentration of instructor teaching and social presence) from the comparison of instructor teaching and student social presence. Despite the difficulty Shea, et al. uncover in reliably identifying the affective group of social presence indicators in content analysis, they found that the relationship between instructor social presence and student social presence to be stronger than that of instructor teaching presence and student social presence. They go on to suggest that social presence in students may develop not merely from “a stable pattern related to the passage of time in course,” but “may be contingent on instructors and instructors working in concert.” (p. 17). This suggestion complements their finding that the degrees to which the instructor is engaged in activities evidencing both social and teaching presence affects the corresponding development of social presence in students. In other words, students are influenced not only by the instructor’s performance in the role of instructor, but the extent to which the instructor presents his or her personality.

In light of the demonstrated impact of instructor’s social presence, Lowenthal and Dunlap’s (2009, 2010) work bears mention. These researchers have sought new ways for instructors to focus on social presence in their online courses. They have suggested digital storytelling as a social presence-rich method of introducing oneself to the class. Digital storytelling uses multimedia to provide opportunities for self-disclosure,

emotional expression, and humor, as well as model expected sharing behavior, communicate values, establish voice, and begin the process of building trust, connection, and community” (p. 72). In the earlier paper, Lowenthal and Dunlap suggest the use of Twitter, a microblogging tool with synchronous elements, as a means of sustaining instructor’s social presence outside the class and throughout a semester. These researchers’ use of creative production strategies by students to increase social presence in online courses speaks to the opportunities creative writing might provide for students in online courses to create strong connections with their classmates.

In an earlier study, Picciano (2002) sought to move beyond merely measuring student perception of presence and interaction. He collected data on student activity in the discussion forum and data on student performance in the form of scores on an examination and scores on a written assignment. Participants in the course also completed an end-of-course survey which included items relating to perceived social presence in the course. Based on students’ discussion board activity, Picciano grouped participants into low, moderate, and high interaction groups. He found no significant difference in how participants in the three groups performed on the examination, but students in the high interactivity group were found to have performed significantly better on the written assignment than the other groups. Perception of social presence, however, did have a strong relationship to scores on the written assignment, which Picciano infers might be due to the better “socialization” of the highly interactive group who may have been open to more points of view.

Picciano’s study fails to account for the *quality* or *type* of postings made in the discussion board—participants’ interaction levels were defined purely by the number of postings made by each (though, interestingly, Picciano excluded “one-line ‘me too’ postings and social messages” [p. 29], though it seems clear that these messages illustrate

at least some degree of interaction or presence). One interesting feature of Picciano's study is his comparison of students' perceptions of their posting activity to the actual number of messages posted. Participants in the low interaction group were more likely to over-report their postings and those in the high interaction group were likely to under report theirs. Participants in the moderate interaction group reported perceived postings much more consistent with their actual posting frequency. This is an interesting finding in light of Russo and Campbell's (2004) finding that students saw themselves as the least present in the class as compared to their peers and instructor.

Another application of the categories of social presence defined by Rourke, et al. (1999) is Swan and Shih's (2005) study, which found that perceived presence of an instructor may be more influential in student satisfaction than the perceived presence of their peers. Participants in this study were students enrolled in four sections total of two graduate classes, and comparisons were made by course and instructor. Based on surveys, students were placed into two groups—high and low social presence. Using surveys, interviews, and content analysis of the discussion transcripts in the course, the researchers found differences in perceived social presence between the two classes. This finding is an interesting indication that course design may play a role in students' perceived social presence. The researchers also sought to investigate whether students who perceived differing levels of social presence from peers would act to project their own personalities into the class discussion. They found that students who reported lower levels of social presence from their peers were producing messages in the discussion board with considerably higher word counts (on average, 1.2 times) than other students (p. 123), implying that students' own behavior may be related to how they interpret others' behavior.

Hughes, Ventura, and Dando (2007) sought to validate Rourke, et al.'s (1999) coding scheme for indicators of social presence in their study, this time in a UK context. The researchers struggled with the message as a unit of analysis, as it allowed only for a single coding decision for a message which may have multiple indicators. They also struggled with using the sentence as a unit (which Rourke, et al. advised against) due to the lack of structure to the colloquial writing in the discussion boards. The researchers settled on "natural breaks" in language to segment the text in postings (p. 22). The researchers also encountered problems identifying latent indicators of self-disclosure and inclusivity in messages, and direct references or responses to previous messages. In order to account for the ambiguities they uncovered, their amendments to the coding template included shifting mentions of the students' "lives outside the online group" from indications of self-disclosure to indications of cohesive messages (those facilitating group cohesion). Additionally, the "quoting" and "continuing a thread" categories in the interactive category were deemed irrelevant because the researchers felt that they might represent effects of affordances of the discussion system (rather than authentic decisions) used interchangeably by students. Finally, extra columns were built into the template to provide criteria and keywords to support coding decisions. With these changes to the template, the researchers achieved 0.95 (Holsti's coefficient) scores for inter-rater reliability on text unit division, validating their "natural breaks" approach. For coding reliability, 70% -75% agreements was found among all coding pairs. The purpose of this study was to validate the model and method used by Rourke, et al. (1999), so the reporting of results is not extensive beyond the author's noting that the significant differences in social presence density among the three groups studied.

Swan, et al. (2008) also performed a study to validate a survey for the Community of Inquiry framework developed by Arbaugh, et al. (2008). Working with researchers at

three institutions, the team surveyed 287 graduate student enrolled in classes designed using the Community of Inquiry as a framework, including extensive use of threaded discussion. Instructors in these courses attempted to allow for the interaction of the three elements of the model (social presence, teaching presence, cognitive presence) though the approaches to achieving such a mix were not standardized. Through factor analysis, the researchers identified clusters representing the model's elements, validating the survey instrument they created to identify communities of inquiry in online courses. They mentioned, as one area of future research, the Community of Inquiry framework as applied to applications that are more socially rich than the traditional threaded discussion board. Online courses involving the creative work of students, like writing workshops, provide a socially rich environment well suited to the Community of Inquiry framework.

Boston, et al., (2009), in a large study (n=28,887) investigating relationships between items on the Community of Inquiry survey and retention in online degree programs. They found that social presence indicators were the strongest significant predictors of student re-enrollment, followed by teaching presence indicators and cognitive presence indicators. The researchers also found that a responses to a single survey item (out of 34 total items) accounted for 18% of variance in relation to students' ongoing enrollment in subsequent semesters. This item was "Online or web-based communication is an excellent medium for social interaction." This finding is particularly interesting in light of the difficulty of consistently identifying evidence of some indicators of social presence in actual student activity transcripts (Shea et al., 2010) and Rourke et al.'s (1999) suggestion that some affective indicators are "more trouble than they are worth" (Discussion section, final paragraph). The authors note that those who enroll in online degree programs may already seek social interaction primarily online. It is also worth noting that most students' capacity to engage in and conceive of

social interaction online has changed in the last decade, with the shift toward more socially-centered websites and applications.

In a rare investigation of multiple elements of the Community of Inquiry framework simultaneously, Shea and Bidjerano (2009) conducted another large-scale study assessing cognitive presence and learner engagement. Their survey of 5,024 students in hybrid and online courses was undertaken to validate the Community of Inquiry framework. The researchers performed a cluster analysis to place students with similar responses in groups with regard to their perceptions of teacher presence and their own level of social presence. An ANCOVA analysis was carried out with these groups and the type of course in which the student was enrolled (hybrid or fully-online) as a potential predictor for cognitive presence perceived by students. They found that “variance in student ratings of their cognitive presence levels can be accounted for by variance in their assessment of teaching and social presence” (p.213). They also found that reports of high teaching presence had a larger impact on students in the fully-online classes than in their hybrid counterparts. This study could have been strengthened by including data from and analysis of course transcripts, but it is understandable, given the size of the sample, that the researchers collected only survey results. Additionally, the diversity of courses and subjects included in the sample may have contributed to trends in the survey responses; as the researchers were aware of only the mode of the course (i.e., hybrid or fully-online) other difference may have been hidden.

Garrison, et al. (2010) further confirmed the essential role that teaching presence plays in the development of student social presence in a study of more than 200 students in different online degree programs across the US and Canada. Additionally, they suggest that the different dimensions of social presence (affective, group cohesion, open

communication) should be investigated so that relationships among each category with the other forms of presence can be uncovered.

Noting that course content has only been discussed “in generalities” in the preceding literature, Arbaugh, Bangert, and Cleveland-Innes (2010) found disciplinary differences in perceptions of the three types of presence that make up the Community of Inquiry framework. In their survey of 1173 students in hybrid and online courses at one school, they found strong indications that students in Allied Health and Technical courses (including courses focused on technical trades) perceived higher levels of presence than did students in Nursing, Business, Engineering, Science/Math, and Social Sciences (p. 41). The researchers noted that the “constructive and reiterative” nature of the Allied Health and Technical fields may support more of the activities through which the three types of presence are expressed. Another interesting finding from their survey was that, regardless of discipline, students enrolled in online courses reported higher levels of presence in asynchronous online discussion portions of their course than did students in hybrid courses.

Extending the breadth of fields to which the Community of Inquiry framework has been applied, Barber (2011) investigated its use in the online critique (crit) portion of a graphic design course. Mapping the various features of the crit process to indicators of social presence, Barber creates “guiding principles” for the design of an online crit process and curricular goals for addressing these principles. These include “... establish a balance between academic (formal) and social activity (informal),” the ability to take risks without penalty,” and “[establish] shared identity of the group and group norms” (Social Presence section). This particular paper is useful for the current research in that it deals with student critique of peers’ creative work, and involves reciprocal turn taking in

which students shift from having their work critiqued to acting in the role of the critic as well.

This section has focused on presence, specifically social presence in asynchronous discussion, both through students' perception of their peers and as evidenced by the projection of their personalities within the online course environment. Among these researchers' findings are indications that social presence is both afforded by the system and shaped by students, that shifts in social presence occur over the course of a semester, and that presence relates to student satisfaction in online courses. However, before students can form perceptions of social presence, they themselves must participate in the course.

Interaction and Participation

Since the dawn of CMC in education, researchers have investigated what motivates learner participation, a necessary precondition for interaction among learners and their peers, their instructors, course content, and the course system. However, participation has been defined in a number of different ways by researchers (Hrastinski, 2008), and even activities that some may consider non-participation have been recast as participatory acts (Russo & Benson, 2005; Dennen, 2008). Recently, researchers have investigated instructional methods that affect the quality of participation in asynchronous discussion (Kanuka, Rourke, and LeFlamme, 2007).

Ramos and Yudko (2008) performed a cross-validation study investigating whether discussion board participation (characterized by number of posts made and number of posts read) in two online classes was a predictor of performance on course quizzes. They found that discussion board activity had no effect on performance, but that

frequency of “hits” on course content pages, that is, independent use of non-peer supplied information, did correlate positively and significantly with quiz performance. This study is interesting because it is one of few that consider reading of posts in the discussion board as an activity worth measuring. However, this study, like many others, equates participation with frequency of discussion board activity without any consideration of the quality or nature of that activity.

Dennen (2008) examined non-posting behavior in asynchronous discussions. In her end-of-term survey of students in two education courses (one at the undergraduate and one at the graduate level), she found that more than half of the students considered both reading and posting messages as valuable learning experiences. Reasons students reported for “lurking” in the discussion board without making a mark included seeking appropriate messages for reply, seeking models for the messages they intended to post, and to ensure that the posts they planned to make were not redundant. Additionally, students who reported posting only the required number messages and reading only enough messages to make their own posts were less likely to have valued the discussion board experience. This is interesting, as it implies that students who spent more time with the discussion board got more out of the process, despite the fact that, upon assessment, their behavior may have seemed equivalent to that of those who posted only at minimum. This study was limited to student reports of their activities, and the reports came only at one point in the semester. This study’s conclusions could have been strengthened with data regarding posting and reading behavior from the course management system.

Thomas (2002) interpreted a higher “hits”-to-messages ratio (that is, more messages read than posted) at the beginning of the semester as evidence of “exploratory activity” in which students became comfortable with the course format (p. 356). This corroborates Dennen’s above finding that non-posting activity was useful for students.

Dringus and Ellis (2005) addressed the problem of assessing participation in discussion board posting with an opposite approach, through data mining. In their article, they proposed the inclusion of a variety of indicators of participation and presence in any data mining procedure to allow instructors to pose complicated queries about participants' behavior. Their ambitious approach combined cognitive and social indicators of presence, timing and pace of discussion posts, links among posts and other resources, and types of contributions, among other items, to answer questions about individual participants or threads. The researchers caution that a data mining approach alone does not provide adequate means for assessing student performance, but that it might lend support to instructors dealing with hundreds of postings and dozens of threads in an online class. Their subsequent large-scale study (Dringus and Ellis, 2010) of the complete archives of five sections of a graduate human-computer interaction course was carried out with these recommendations in mind. They investigated the temporal aspects of discussion posts, measuring density, intensity, latency, response count, and "wellness rating" (a composite of other variables indicating activity level). These variables were compared with a qualitative analysis of discussion transcripts, to determine that the momentum of posting in discussion forums declined after 31 days. They also observed that discussion forums launched closer to the start and end of the semester experienced "the most difficulty in maintaining momentum" (p. 348). Their study is helpful in its approach to identifying temporal patterns that influence participation, but the qualitative analysis, which assigned one of four codes (on-topic, off-topic, topic-shift, and standalone-erroneous) to each message was a simplistic assessment of the quality of the interactions taking place.

In their case study of two sections of an online graduate course, Vonderwell and Zachariah (2005) identified a variety of factors that influenced student participation in

asynchronous course discussions: technology and interface characteristics, content area experience, student roles and instructional tasks, and information overload. Their data were collected from multiple sources including discussion transcripts, surveys, email messages, and reflective essays. This study is interesting because it identified that students interpret the interface of the learning environment inconsistently and have individualized responses to the volume of messages that accumulate in the course.

Hew and Cheung (2008) investigated how participation in asynchronous discussion influenced peer facilitation in a graduate education course. They identified seven facilitation techniques exhibited by students including giving own opinions, questioning, establishing ground rules, showing appreciation, suggesting new directions, personally inviting others to contribute, and summarizing. Although they do not refer to the work of Rourke, et al. (1999), Hew and Cheung's facilitation techniques map very closely to the indicators of social presence Rourke's team investigated. They also place heavy focus on the depth of threaded discussions (i.e., the number of sub-thread levels) as a measure of facilitation success, despite the fact that it has been shown that message threading can be due to interface affordances (Hewitt, 2001) rather than based on actual conceptual decisions on the part of the student. Additionally, this study does not take into account students' perceptions of the success of the various facilitation techniques.

Each of these studies focuses on the learning environment in which discussion forms around prompts or questions, usually supplied by the instructor, in which students collaborate to explore. However, study is needed regarding collaboration around content that is authored by students themselves. Lapidat (2002) characterized the interactivity afforded by asynchronous discussion board as facilitative to social and cognitive meaning construction, affording students the opportunity to "look-back and incorporate others' contributions into what they are writing" (conclusion section).

More recently, Nagel and Kotze (2010) applied the Community of Inquiry framework to a “super-sized” graduate level class in Accounting and Management to investigate the impact of a double-blind peer review process. The process itself, heavily mediated by the learning management system and by the instructor, enabled anonymous review of student work, both as a means of reducing the demands on the instructor and to enhance student participation. In addition to administering the Community of Inquiry survey instrument to students in this class, the researchers also had participants provide open-ended feedback on various features of the course. Though their content analysis of the open ended appears to have been casual (no coding information or inter-rater reliability statistics were provided), the researchers conclude that the instructor’s plan for the peer review process enhanced levels of both the cognitive and teaching presence in the course. Curiously, however, they additionally conclude that social presence in the course was enhanced through the anonymous review process. This is problematic due to the fact that most of the social presence indicators in the Community of Inquiry framework are linked very closely to the student identity—that students are perceived as “real people.” It is likely that some expressions of open communication or affective expression might be present in these reviews (without excerpts supplied, one cannot be sure), but whether or not group cohesion can be expressed or established in an anonymous activity is an open question. This study is useful for the current research due to its investigation of peer response to student work, but it fails to consider that cognitive and teaching presence might actually be hindered if access to the identity of other students is restricted in this manner. The researchers note that the double-blind peer review “provided a space to express honest opinions” (p. 50), and thus increased social presence, but a foundation of social presence, it can be argued, is the creation of an environment in which students feel free to do exactly this.

These studies generally show that participation, like social presence, is influenced by both interface factors and by the interactions taking place in the online learning environment. Research has shown that participation can be influenced by prior experience, may shift over time, and that what is seen by some too much participation from peers can reduce their own motivation to participate. Additionally, this research has shown that learners view more passive modes of participation, such as reading or watching others interact as valuable activities.

METHODOLOGICAL CONCERNS

In the literature reviewed above, content analysis, surveys of student perceptions, and data collection from the course management system emerge as a set of methods used to measure interaction, participation, and student presence within asynchronous discussions. What these studies fail to cover is what additional interface elements, such as view counts for discussion posts, contribute to student perceptions of peer presence and engagement. Additionally, the majority of these studies take place in courses where discussion board activity was guided by instructor prompts. Student perceptions of interaction in asynchronous environments with texts *they themselves* have individually authored represent an exciting research opportunity.

There are several common methodological concerns regarding the research discussed in this literature review. The first deals with measuring actual participation and interaction among students in online learning environments. Some studies rely solely on student perceptions of interaction and participation. Others equate quantitative data such as posting frequency, length of messages, or time spent logged in to the course environment with evidence of interaction or participation, rather than attending to the

quality or nature of those messages. Additionally, most studies have focused only on the active posting behavior of students, not taking into account the passive behavior of reading or checking in on discussions as they develop, or students' impressions or awareness of these behaviors. A strong research design for measuring these phenomena will include both analysis of the content of students' postings, analysis of quantitative data reflecting active and passive use of the course environment, and data gathered from students regarding their perceptions of what has occurred in the class.

Where content analysis in CMC is concerned, considerable attention in the literature to has been paid optimizing the technique, coherently tying the technique to its underlying theoretical framework, and casting light on issues of validity.

De Wever, et al. (2006) reviewed 15 studies employing content analysis to the transcripts of asynchronous discussions in CMC-enabled learning environments conducted between 1992 and 2005. In their overview, they compared the studies in regard to three attributes: unit of analysis, inter-rater reliability for coding content, and theoretical background.

Regarding the unit of analysis used in each study, eight of the studies analyzed content at the message level, while the rest employed a thematic unit of analysis—that is, a textual segment representing a process or move indexed on a pre-determined scale. Two of the studies used discrete sentences as the unit of analysis, and one study, that of Weinberger and Fischer (2005), employed “units of analysis on micro and macro level” (in DeWever, et al., 2006, p. 12). One reason message and sentence are likely in wide use is their concreteness—units based on form or syntax that can be easily identified though context or punctuation offer clarity to coders, who “can reliably identify when a coding decision is required” (Garrison, Anderson, and Archer, 2001, p. 16). Thematic units, or “units of meaning” (as characterized by Rourke, et al., 1999) which allow for coding at a

finer level, can prove difficult for coders to reliably identify. Strijbos, et al. (2006) critiqued the diversity of unit of analysis in content analysis studies, and identified the problem of “unit boundary overlap” for studies in which segmentation of units is interpreted differently by coders—a challenge for units smaller than message.

Rattleff (2007) proposed a different approach to coding to increase the reliability of content analysis research. Because codes often absolutely categorize each unit of analysis as one code or another, making some coding decisions inconsistent, confusing, or overly reductive, Rattleff proposed a coding scheme in which messages are coded as to whether they contain or do not contain information pertaining to each code. As she described it:

...instead of operating with only one variable (information) with three possible outcomes (academic, practical-organisational, or personal), I defined three variables with two possible outcomes each, that is, having or not having e.g. academic information. Rather than classifying information in a CC [computer conference] message as one or another kind, each CC message was classified as having or not having all three different kinds of information. (p. 237)

A similar method was used by Anderson, et al. (2001) in the early Community of Inquiry study on teaching presence and in Lobry de Bruyn’s (2004) study.

DeWever, et al.’s (2006) comparison illustrates that early studies did not report inter-rater reliability measures, but later studies have used a variety of methods for assessing this crucial measure, including percent agreement among coders, Holsti’s coefficient, which has been criticized for not accounting for chance agreement in coding (e.g., Rourke, et al., 2000), and Cohen’s kappa, which is a chance-corrected statistic for inter-rater reliability between two coders (Banerjee, et. al., 1999). The latter demands that researchers are aware of the total number of coding decisions (i.e., units of analysis) in advance. For this reason, Cohen’s kappa is not appropriate for studies employing thematic units of analysis, the total number of which may vary among coders (e.g.,

Rourke, et al., 1999). Landis and Koch, who popularized the use of Cohen’s kappa for inter-rater reliability in research that involves two coders and a set number of coding decisions, (1977, p. 165) set out the following benchmarks for ranges of kappa statistics:

Kappa Statistic	Strength of Agreement
< 0.00	Poor
0.00 – 0.20	Slight
0.21 – 0.40	Fair
0.41 – 0.60	Moderate
0.61 – 0.80	Substantial
0.81 – 1.00	Almost Perfect

Table 1: Strength of Kappa Statistic from Landis and Koch (1977).

Researchers often report multiple statistics to demonstrate inter-rater reliability (Rourke et al., 1999; Shea, et al., 2010). For the chance corrected kappa measure, Riffe, et al. recommended a range of 0.80 to 0.90 as acceptable for reliability figures, though they allowed for levels below that range if “the research ... is breaking new ground” (p. 131). Much of the research reviewed above refers to this special case, but Riffe, et al. warned of making inferences based on kappa levels below 0.70.

Schrire (2006) used qualitative approaches to reliability, including re-calibration of coding meanings and exploration of inter-rater discrepancies alongside the multiple raters, training, and inter-rater reliability measures in the quantitative tradition.

Rourke and Anderson (2004) returned to content analysis to suggest methods for increasing its validity as an approach. They suggested that researchers develop a

theoretically valid protocol through “identifying the purpose of the coding data... identifying behaviors that represent the codes... reviewing categories and indicators... holding preliminary tryouts [of the coding process]... [and] developing guidelines for administration, scoring, and interpretation of the coding scheme” (p. 8). Another suggestion they offered was intended to help researchers gather empirical evidence for validity. Three methods the authors believe lend themselves to content analysis are correlational analyses, examinations of group differences, and experimental or instructional interventions.

Regarding theory, DeWever, et al. (2006) identified a variety of frameworks at play in the research they reviewed. All but four of the studies dealt with knowledge construction and learning. Of the four, three were rooted in the Community of Inquiry framework (Rourke, et al., 1999; Garrison, et al., 2001; and Anderson et al., 2001; discussed above) and one explored interactional exchange patterns within Social Network Theory. The studies that deal with more with socialization and less with social construction of knowledge or learning strategies, specifically Rourke et al. (1999), Garrison, et al., (2001), and Anderson et al., (2001), relate most closely to this dissertation. The theoretical framework of those studies will be explored in more detail in the next section.

Chapter 3: Research Context and Method

THE RESEARCH PROBLEM

As illustrated in the above literature review, researchers have been investigating the impacts of CMC in learning environments on learners for more than two decades. The egalitarian and democratic promise of discussion that is free of the constraints of the classroom to which Harasim (1989) alluded has not yet been realized.

However, new interactive tools are continually designed and introduced—features first made popular on the World Wide Web make their way into the ubiquitous course management systems employed by educational institutions. Whether or not these new tools enhance the learning environment is a source of frequent study. Thomas (2002) and others have noted that the opportunity for participation afforded by these tools does not necessarily motivate learners to participate.

Drawing from constructivist models of learning, researchers have cast interaction as a key component in online learning. For this reason, they recommend pedagogical designs that maximize opportunities for social interaction among learners.

Trends in user-generated and user-focused content on the World Wide Web are shifting the role of online course materials, student work, and communications channels in instructional settings. Interface features like tags, comments, and ratings, which have become commonplace on the World Wide Web, are being designed into instructional technologies with the intention of enhancing the social experience of online learning.

The widespread use of technologies that expose learner interactions with course materials and with their co-learners provides an opportunity to investigate how these

interaction traces can affect learner experience within the asynchronous learning environment.

Study of the facets of these features in asynchronous learning environments is required to determine whether the same benefits and challenges presented by their use on the greater World Wide Web are at play within instructional contexts. Instructors and students alike are presented with opportunities to understand the behavior of others within the asynchronous learning environment; their interactions (or lack of interactions) with course content are made apparent and can become a part of the social fabric of the course.

PURPOSE OF THIS RESEARCH

The research in this dissertation investigates how learner use and perception of features which make user interactions apparent—interaction traces—may differ in bounded learning environments from their use on the greater World Wide Web, where activities are free of instructional objectives, institutional constraints, assignments and formal assessment.

This research was also undertaken as an opportunity to shed light on the use of CMC tools and interaction traces in an environment that has not been widely represented in research on distance learning—creative writing workshops. Whether the anxieties, triumphs, and challenges associated with CMC in more structured courses focused on summative outcomes transfer to the formative and open-ended realm of the creative writing workshop is a question this research seeks to address.

The aim is to understand what interaction traces may bring to such a learning environment and how they may be employed to enhance the design of such environments

and to inform instructional strategies. Additionally, attention to these interactions may afford new ways of understanding and assessing the construction of community in asynchronous learning environments.

RESEARCH QUESTIONS

This dissertation research explores the following research questions:

- 1) Do interaction traces affect perception of social presence among co-learners within asynchronous creative writing workshops?
- 2) How do learners respond to evidence of interaction and critique as expressed through interaction traces attached to content they have authored? Do their responses change over time?
- 3) How do learners' media preferences and online behaviors outside of instructional settings affect their behaviors in online creative writing workshops?
- 4) Do learners represent their own social presence through interaction traces in online creative writing workshops?

THEORETICAL FRAMEWORK

Recent research in online learning has long been rooted in the Social Constructivist epistemological approach. The emphasis on interaction present in the literature reviewed above reflects a strong emphasis on the social construction of knowledge and the ability for learners to actively define the learning environment. The work of educational theorists including Dewey, Piaget, and Friere have guided research and design in online learning environments in a shift from the independent nature of early distance education to the collaborative and dialogic approaches currently in use.

Moore, whose three-level definition of interaction was discussed previously, developed the Theory of Transactional Distance, which has underpinned much research in distance education (Saba, 2003). Based in the tradition of 1970s and 1980s correspondence courses, transactional distance represented the relationship between the learner and the instructor, and was “the first American theory to define the field [distance education] in pedagogical terms” (Moore, 2007, p. 90), shifting research in distance education from an examination of the technology to a focus on a new environment for teaching and learning. The emphasis in Moore’s theory is on the relationship between instructor and learner, but, as evidenced in his 1989 definition of interaction, which included as including learner-content interaction, learner-instructor interaction, and learner-learner interaction, Moore situated the learner among several relationships in the distance learning environment.

These interactive relationships have guided researchers in distance education to look beyond distance education as a two-way channel in which knowledge is sent to the learner and reflected to the teacher. Concepts and theories of learning that involve social processes and practices, such as Vygotsky’s (1978) Zone of Proximal Development, Lave and Wenger’s (1991) theory of Situated Learning, and Bandura’s Social Learning Theory (1977) (and later Social Cognitive Theory [1997]) have been quite influential to researchers in online education. Particularly, these theorists’ elucidations of the effects observing or engaging with others’ work can have on an individual learner have guided researchers in their examination of how learners participate in online instructional settings.

Some (e.g., Schwen and Hara, 2004) have been critical of the enthusiasm for the Situated Learning and Community of Practice theory with regard to online communities and others have expressed difficulty in operationalizing the theory for research in

information behavior (Davies, 2005). Despite these criticisms, dozens of researchers in online education have drawn from Lave and Wenger (1991) and Wenger's (1998) work (e.g. Fox, 2002; Juwah, 2006; Suthers, et al., 2008). The concept of "legitimate peripheral participation" is particularly helpful in this dissertation research as a lens through which to view participation—both active (posting work, commenting on the work of others) and hidden ("lurking," reading)—and how students perceive learning from their peers. However, as Swann (2009) observed, Communities of Practice are based in relationships created over time in the working world, and the semester-long course is not a sufficient timeframe in which to form true communities of practice.

The Community of Inquiry framework (figure 5) was established as a theoretical perspective for the specific context of asynchronous online discussions, which Garrison, Anderson, and Archer (2010) credit with shifting the focus of distance education from independent work by students to the collaborative modes most common today (p. 5). Swann (2009) noted that research conducted using the Community of Inquiry framework has emphasized "the people having the conversation rather than [...] the conversation itself" (p. 1034). This model is rooted in "collaborative constructivist perspective" (Garrison, Anderson, and Archer, 1999, p. 92) to teaching and learning, focusing on how different forms of presence (social, cognitive, and teaching) interact to support critical thinking, knowledge construction, and collaboration in asynchronous learning environments. The framework draws from Lipman's (1991) vision of a community of inquiry (a phrase which Lipman credits to C.S. Pierce), as structure within which students listen to one another with respect and build on

one another's ideas, challenge one another to supply reasons for otherwise unsupported opinions, assist each other in drawing inferences from what has been said, and seek to identify one another's assumptions. A community of inquiry attempts to follow the inquiry where it leads... (p. 15)

The framework was designed to combat the “ruinous effects of the technological imperative on education” that its developers witnessed in the 1990s, with the confluence of the popularity of asynchronous discussion in learning and the dearth of prepared students and practitioners to work within them (Rourke and Kanuka, 2009, p. 20). The three elements of the Community of Inquiry—cognitive presence, social presence, and teaching presence—were presented as essential for any technological or instructional design to fulfill the promise of asynchronous communication in learning environments, both at a distance and in blended settings (Garrison, Anderson, and Archer, 1999). Their earliest Community of Inquiry paper outlines a content analysis coding template grounded in the Community of Inquiry theoretical framework; later research developed a survey instrument to investigate the framework through learner perceptions (e.g., Rourke and Anderson, 2002; Swan, et al. 2008)

The concept of cognitive presence in the framework is based on Garrison’s (1991) model of the critical thinking and learning cycle, revised as the model of Practical Inquiry (figure 8) in later work developed by Garrison, Anderson, and Archer (1999). This model outlined private and shared worlds in which reflection and discourse occur respectively and repetitively.

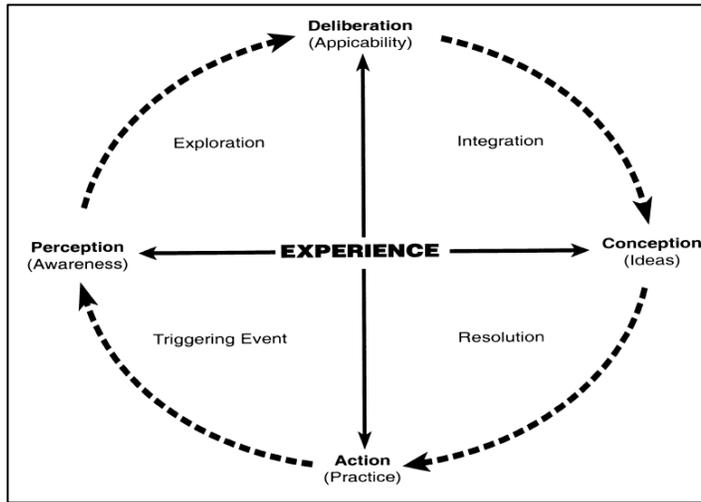


Figure 8. Model of Practical Inquiry from Garrison, Anderson, and Archer (1999), p. 99.

From this model, the authors drew out four categories of cognitive presence: triggering event, exploration, integration, and resolution. Operational indicators for each of these categories were outlined to guide researchers in assessing the cognitive presence in a discussion (though aspects of cognition that occur in the private world quadrant of the model can be measured only if they are discussed). This element of the framework is the most course-content-oriented part of the Community of Inquiry.

Teaching presence, which describes the degree to which the instructor’s role is projected into the Community of Inquiry, represents a more outcomes-oriented part of the framework, focused on the underlying structure of a course. The categories of interactions that indicate teaching presence are outlined by the authors as instructional management, building understanding, and direct instruction. Garrison, Anderson, and Archer envisioned teaching presence as guiding social and cognitive presence through activities including “regulation of the amount of content covered, use of an effective

moderation style in discussions, determining group size, understanding and capitalizing on the medium of communication, and making supplemental use of face-to-face sessions” (1999, p. 96-97).

Of primary interest for this dissertation research is the element of social presence, which can be seen as the specific focus on “people having the conversation” to which Swann (2009) referred. Social presence, as outlined in the Community of Inquiry framework, takes into account different channels and motivations for social interaction among students in asynchronous communication. Garrison, Anderson, and Archer, defined social presence as “the ability of participants in the Community of Inquiry to project their personal characteristics into the community, thereby presenting themselves to the other participants as ‘real people’” (2001, p. 89), echoing the definition developed by Short, Williams, and Christie (1976) and adapted by others (e.g. Gunawaradena, 1995). Within this framework, communication is interpreted as emotional expression, group cohesion, and open communication (also referred to as “interactive” in some articles) categories, which represent personal emotional states, a sense of belonging, and engagement in dialogue, respectively. These categories were operationalized by Rourke, et al. (1999) as affective, interactive, and cohesive in the initial research on this model (figure 4) and by later researchers. Self-expression, use of humor, emotional expression, and disclosures about a learner’s out-of-class life comprise the emotional/affective category. Quoting others, referring to others, asking questions, complimenting, and agreeing comprise the open communication/interactive category. Addressing participants by name, using collective pronouns, and salutations comprise the group cohesion/cohesive category (Rourke, et al., 1999; Garrison, Anderson, and Archer, 1999). Garrison and Arbaugh (2007) and Rourke and Kanuka (2009) summarized findings from empirical research using this framework, illustrating that social presence can be

developed through collaboration, that social presence is used to support and inform learners about the technological environment, and that levels of social presence change during the course of ongoing online discussions.

In the 10 years since the Community of Inquiry framework was developed, these three social modes of communication have flourished on the World Wide Web, and have come to be expected by users in countless arenas—from online stores, to online diaries and photo albums, to online newspapers.

The rise of social networking and social media websites have confirmed the assertions of Gunawardena (1995) and others (including the researchers responsible for the development and use of Community of Inquiry framework), that users can project themselves into CMC systems. Perhaps none of these researchers would have predicted the explosion of social presence as the ubiquitous organizational construct it has become on the World Wide Web. For these reasons, the social presence concept of the Community of Inquiry framework has heavily influenced the approach to this study and has informed its design, described below.

RESEARCH METHOD AND DESIGN

Writing in the same volume as Henri's (1992) influential paper, Mason (1992) suggested that a case study approach is appropriate for studies of interaction in asynchronous computer conferences, the advantages being the "rich and wide ranging picture" it can provide and its relation of multiple points of view (p. 112). Waggoner (1992) recommended the case study approach as a means of accounting for both actual and perceived participation in asynchronous communication.

A case study methodology was employed in this dissertation research. This study is an appropriate application of the case study for a number of reasons. First, the study focuses on bounded systems: two online classes that are bounded by enrollment, by time, and by place (the online course environment).

The fact that two different cases were examined in this research, a poetry workshop and a fiction workshop, also suits the case study approach. Yin (2005) indicates that consideration of multiple cases, what Stake (1995) terms “collective case studies” (p. 4), can strengthen the research and expand the degree to which it can be generalized beyond what would have been possible with a single case. The structural similarity between these two courses provided the opportunity for cross-case analysis (Creswell, 1998, p. 63).

Further, many of the research projects discussed in the preceding literature review also employed a case study approach (e.g., Thomas, 2002; Vonderwall and Zachariah, 2003; Kanuka, Rourke, and LeFlamme, 2007). One study in particular, Schrire (2006), has been particularly meaningful for this dissertation. Schrire employed a collective case study approach to three asynchronous computer conferences and made heavy use of content analysis in her research. Like Henri (1991) and Hara, Bonk, and Angeli (2000), Schrire supplemented her understanding of student interactions in the message boards with message mapping, providing evidence of *where*, not just *whether*, interaction took place. Finally, Schrire’s use of purposive sampling in transcript selection allowed her to account for the sequential nature of discussion posting and to flexibly address new questions stemming from analysis of earlier transcript samples.

Compared to the scenarios examined in the preceding literature review, the environment in which this study will be conducted—the online creative writing workshop—represents a special and interesting case. Therefore, the in-depth, descriptive

attention afforded by the case study approach is appropriate. Due to the use of common course management systems, many of the technologies and instructional methods may be common across online creative writing workshops and the earlier studied courses in education, computer science, and other disciplines. However, there are a few substantial differences between the workshops and other classes described in the literature. The content prompting discussion in the online writing workshops was primarily the creative work of students, with the goal of encouraging peer feedback and constructive criticism for the authors of the works. In most other studies of behavior on discussion boards, the discussion activities are based on instructor-led or content-based prompts

Also special about the creative writing workshops examined in this dissertation is the fact that many of the students enrolled in the workshops are non-traditional, part-time undergraduate students who may bring very different experiences to the online course setting than the graduate student participants in the majority of the literature reviewed.

Finally and most saliently, this study lends itself to a case study because that approach can accommodate the variety of data collection methods that are available to the researcher. Yin (2003) noted that “a major strength of case study data collection is the opportunity to use many different sources of evidence” (p, 97). A case study methodology will afford the integration of several different modes of data collection in this study.

STUDY PARTICIPANTS

Participants for this study were recruited from two undergraduate-level creative writing workshops taught online through an East Coast University’s part-time study program. This program at the University offers courses taught by University faculty to

students seeking to complete their undergraduate and graduate degrees through part-time study with many online-only course options. The majority of students in this program are non-traditional students; the average student age is 35, and most students work full time. Though the target population for this program comes from the county in which the University is located, non-local students have access to the program's online courses. Additionally, during the regular long-semesters, some full-time undergraduate students enroll in the part-time study course sections.

Participants for this were enrolled in the Fall 2010 sections of the two courses. Enrollment for each of these courses is usually capped at 16 students and the sections are consistently full. Recruitment was conducted via email during the first week of class. Students were offered \$25 bookstore gift certificates for their participation. Of the 29 students enrolled in the two courses, 15 agreed to participate in the study.

DESIGN OF THE CREATIVE WRITING WORKSHOP COURSES

The two online writing workshops, Poetry 215/402 and Fiction 217/404, are affiliated with the University's English Department, and are both taught by its faculty. The courses have been offered online for the last five years, and taught simultaneously each semester by the same faculty member. Regular sessions of the courses are taught over a 15-week semester.

Each course is offered as a lower-level (21X) and an upper-level (40X) course, but students registering for either level are enrolled in a single section. The students enrolled in the 400-level course have slightly more work to complete in the courses, but there is no prerequisite for the course in either case (students registered for the 400-level

courses are distinguished only by the fact that they have completed more course credits toward their degrees).

The courses are taught using the University installation of Blackboard, a popular course management tool administered at the institutional level. The courses share a similar structure (with some differences, detailed below), and make heavy use of Blackboard's discussion board feature. Activities in the course are organized weekly; new materials are made available on Mondays and students have until the end of the following Sunday to complete their postings.

For the initial weeks of both courses, students are assigned readings in fiction or poetry accompanied by written "lectures" from the instructor in the form of essays. During these weeks, students are required to respond to discussion threads posted by the instructor based on the readings. Additionally, students complete creative exercises that are posted to the discussion board as well. Responses to initial weeks' discussions and submission of exercises (in the fiction course only) each account for 20% of students' final grades.

After the initial weeks of the course, the focus shifts from readings, lectures, and exercises to the students' creative work. Once these "workshop" weeks begin, student work is posted to the discussion board and students are required to comment on the work of their peers. A minimum number of words is required for credit (table 2), but students are encouraged to engage in dialogue regarding their work and the work of their peers.

Student response word-count requirements per posting by course level		
	21X-Level	40X-Level
Poetry	100	200
Fiction	200	300

Table 2. Student response word-count requirements per posting by course level

To account for the high levels of reading and posting required of students in the workshop weeks, students are not responsible for posting their creative work every week. For the poetry workshop, students are split into two groups and students in each group post poems on the same day, alternating by week, for several weeks. In the fiction workshop, students are required to post only a single short story during the semester; two to three short stories are posted each week. In each course, students have weeks where they both post work and critique the work of others and weeks where they are responsible only for posting critiques. Students are expected to revise their work based on the critiques posted by their peers for final submission to the instructor at the end of the semester. Posting of work to the discussion board and submitting it to the instructor in a revised version accounts for 30% of the students' final grade in the fiction course and 50% in the poetry course; the posting of feedback on others' work accounts for the final 30%.

The manner in which the course instructor uses Blackboard discussion board in this course presents students with two distinct types of interaction traces: comments on student works, in the form of discussion posts, and views (i.e., the number of times a particular message has been accessed by members of the course). While other interaction traces (tags, ratings) are also part of the Blackboard discussion interface, the instructor suppresses them to focus student feedback in the form of written comments. The instructor has expressed to the researcher that she believes the use of ratings in the

workshop environment would be distracting to students and would prevent the dialogue she seeks to encourage from emerging.

For this research, both the posting of messages and the reading of messages was considered participation in the course. Interaction and social presence is measured through analysis of the content of those messages and through students' perceptions of their own interactions and those of their peers.

DATA COLLECTION & ANALYSIS

Based on information learned in initial conversations with the instructor, data collection methods for this study were designed to be as unobtrusive as possible, while still providing access to students' perceptions of what takes place in the course. Many of the students who take courses through the part-time program juggle their coursework with the demands of full-time employment, family responsibilities, and any number of competing priorities. The instructor expressed that if participation in this study were perceived by students as a substantial addition to the already-high workload in the course, students would be likely to decline to participate. For this reason, steps were taken to minimize the time required to participate. Students were not required to participate in the study, and received no extra credit for their participation. Data were collected through the following methods.

Surveys

Participants were asked to complete pre- and post-course surveys (Appendix A and C, respectively) and brief, interstitial surveys (Appendix B) at milestones in the

course. Surveys were delivered via Survey Monkey, an online survey mechanism located outside of the Blackboard Course Management System.

Participants were recruited from the course roster via email, and initial surveys (Appendix A) were administered during the third week of the course. These surveys gathered students' demographic information, information regarding students' use of online social networks and websites, and reports of their experiences in asynchronous learning environments.

During four weeks in the semester, students were asked to complete brief interstitial surveys (Appendix B) with items relating to interaction and social presence within the system during that week's activities. To maximize the chances that a single participant would complete surveys during weeks when they served as author/critic and critic only, two sets of back-to-back weeks were chosen for the interstitial surveys: weeks 7 and 8 and weeks 11 and 12. These interstitial surveys contained items addressing the students' awareness and impressions of the interactions taking place within the course, and their feelings of engagement with their coursework and the other learners in the course. Participant perception of social presence was collected from the interstitial surveys, which contained relevant social presence items from Arbaugh, et al.'s (2008) instrument (items 2, 3, 4, 5, and 6). Furthermore, these surveys included items regarding student participation in the discussion (e.g., "I posted more than was required") and the amount of reading and writing in which they engaged. One open-ended question, asking students to describe a meaningful comment they read that week, was also included.

The final survey, administered during week fifteen, solicited information about students' impressions of the course as a whole, their satisfaction with the structure of the course, and their overall perceptions of social presence they experienced. Surveys were

administered in a manner allowing single students' responses to be tracked across the complete set of instruments and thus associated with the data gathered via other methods.

Discussion Transcripts

Transcripts for all course discussion threads were archived and made available for analysis at the end of the semester. A new discussion forum thread was created for each primary text (reading/lecture, poem, or story) with the intention that all discussion of that text would take place in the thread. Transcripts of these forums included all messages posted to a discussion, along with the metadata corresponding to each message (author, subject line, date and time of posting) and the number of times that post was viewed by members of the course.

Discussion transcripts were analyzed for social presence using content analysis methods based on the work of the developers of the Community of Inquiry model (most notably Rourke, 1999) and informed by the subsequent work of Rourke and Anderson (2004), Schrire (2006), and Hughes, Ventura, and Dando (2007).

Interviews

After the course ended, the instructor of the courses was interviewed regarding her response to the students' activities in the discussion board and her impressions of the effect of the peer critique on the work submitted by students in their final portfolios. Questions for the instructor interview (Appendix J) were developed based on observations and themes emerging from the other data sources. The instructor's feedback is important for this research because her impressions of the group were informed by her one-on-one interactions with the students and her assessment of their final portfolios, to

which the researcher will not have access. Additionally, the instructor's experience teaching these two courses for the previous five years may provide information regarding the uniqueness of these particular courses unavailable to the students and the researcher. The interview, which took place in the instructor's office, lasted roughly an hour and was recorded in the researcher's notes.

In the final survey, student participants were invited to provide a student perspective on the same matters through a brief interview with the researcher. Four students agreed to be interviewed (one in person and three by telephone), with each interview lasting 30-45 minutes. The interviews were recorded in the researcher's notes.

The researcher's write-ups of these notes were member checked with interviewees. In all cases, interview questions and answers were shared with the interview participants to ensure that the researcher represented the conversation and the participants' words and feelings accurately. Both the student responses from the open-ended item on the interstitial surveys and the transcript of the interviews were analyzed in order to uncover themes that did not emerge from other data sources.

Course Management System and Course Documents

In addition to the usage data available in the transcripts for each forum, Blackboard's *Course Statistics* feature provided data regarding student activity within the course environment for specific periods in the course. General reports were generated for each discussion form, allowing the researcher access to forum-specific and student-specific usage information s beyond what the discussion transcripts provided. Posting, reading, and other usage information made available through the Blackboard Course Management system provided temporal context for interactions among students and the

discussion board. Thomas (2002) used quantitative data collected from the system to visualize and analyze when and where postings accumulated. This study employs a similar method of visualizing system usage data to provide context for data collected through other means.

Message views, word counts, and activity data were analyzed alongside results from the content analysis of the discussion transcripts to provide further context to when and how participants interacted in the course.

The researcher was additionally granted archival access to the course management system, was therefore able to “observe” the course in context. Additionally, the researcher received copies of all email messages sent by the instructor as weekly announcements to students.

These course documents, emails to the course, syllabi, and other materials from the Course Management system were imported in to Atlas.TI, a qualitative data management and analysis software package, along with the discussion transcripts, course management usage, survey responses, and interview notes for analysis by the researcher.

The researcher has several years of experience teaching and administering online learning within the Blackboard Course Management System. This experience supported his ability to supplement data collected through other methods consistent with the case study approach, particularly when technology is involved (Yin, 2003, p. 93). Because of this experience, anomalies associated with course management system failures, usability problems, web-browser and file-format issues, and insufficient training of students or instructors could be easily identified in the data collected. Furthermore, the researcher has been a student, instructor, system administrator, and researcher to online courses in a variety of disciplines, including psychology, education, English composition, music, creative writing, computer science, information studies, and many others. This deep

exposure to online learning environments has provided the researcher with a strong understanding of general norms of student and instructor behavior in the asynchronous learning environment and will afford a well-founded exploration of what makes these cases unique.

VALIDITY & TRUSTWORTHINESS

The research described in this dissertation represents a mixed-method approach to examining student participation, social presence, and interaction in online creative writing workshops. The researcher designed this study to accommodate data collection through both quantitative and qualitative methods. This section describes aims taken to ensure the credibility and validity of the research.

Seale (1999) reports on the controversy of applying the terms of quantitative validity in assessing the quality of qualitative research, but notes that questions of validity, quality, and data triangulation benefit the researcher in that they engage the researcher in methodological awareness during decision making.

Yin (2003) identified four areas within which case study validity can be assessed. Patton (1990) notes that the validity and reliability of qualitative data “depend to a great extent on the methodological skill, sensitivity, and integrity of the researcher” (p. 11). Golafshani (2003) describes validity and reliability as being “conceptualized as trustworthiness, rigor, and quality” in qualitative research. Validity has also been addressed in the research and methodological literature that have provided a basis for this mixed-methods study.

Despite the controversy, Yin’s (2003) treatment of the quality of case study research utilizes the quantitatively-informed terminology, and his categories for

evaluation are construct validity, internal validity, external validity, and reliability (p. 34). The approaches that were used to ensure the validity within this framework in this dissertation research are described below.

In order to ensure construct validity, data was collected from multiple sources, allowing the researcher to triangulate among data collected in a variety of ways, detailed above. Additionally, during the case study composition phase, the course instructor was involved in reviewing the case study report to identify and correct potential factual disagreements, thus strengthening the study's accuracy (Yin, 2003, p. 159). Furthermore, student participants in this research project were invited to interviews after the end of the semester to enable member checks, provide additional data, and to be debriefed about the project.

The diversity of data being analyzed helped the researcher to avoid inferences made based on incomplete evidence, thus strengthening the internal validity of this exploratory case study. Since this study sought to describe the activities, interactions, and perceptions that take place within two cases rather than to test and compare any causal relationships of variables between them, internal validity is of less concern than the other areas of validity described in this section. However, the researcher has investigated, analyzed, and reported on competing explanations of evidence, as Yin (2003) recommends.

A degree of external validity was built into this collective case study due to its inclusion of two different online courses. The generalizability of this study is limited due to the nature of the case study approach, in which the focus is on "particularization" and an understanding of the case itself more so than on how this case differs from others (Stark, 1995, p. 8). The theoretical framework within which this study is performed,

however, is an instructive tool for identifying other situations to which the findings of this study can be compared (Yin, 2003, p. 37).

Reliability of this study will be established through a combination of factors, some of which have been discussed above. Multiple inter-rater reliability statistics for the content analysis portion of the study are reported and the case study is here presented with a database of evidence collected for review. Both the survey instruments and the coding templates used in this study have been heavily informed by the Community of Inquiry framework and validated in earlier studies, and seek to directly operationalize its underlying concepts. Such a linkage between theory and instruments was identified by DeWever, et al. (2006) as crucial to reliability of content analysis studies.

Patton (1990) and others have indicated that, in qualitative research, the researcher takes on the role of the “instrument.” I reflect on my role in the data collection and analysis and describe how my own experience informed the data collection, analysis, and reporting of this research in the section entitled “Researcher’s Statement.”

PRIVACY AND CONFIDENTIALITY OF PARTICIPANTS

To ensure the privacy and confidentiality of students’ participation in this study, personal identifying information was removed from all transcripts before any analysis took place. Furthermore, no analysis of activity in the online courses took place before final grades for the semester were submitted by the instructor. As a means of protecting the privacy of students in the courses who do not consent to participate, responses from these students were removed from the transcripts prior to analysis, following the recent example of Hughes, Ventura, and Dando (2007). Additionally, discussions attached to the creative work of students not consenting to participate were not selected for analysis. The

text of creative work of submitted to students, except when briefly quoted, was also removed from the transcripts before any excerpts were included in this dissertation.

CONFIDENTIALITY OF RESEARCH DATA

All research data collected from the Blackboard system and the web-based survey tool were stored in a password-protected account on the researcher's computer. Information shared with research assistants (coders) was scrubbed of personally identifiable information prior to sharing. Back-up copies of data were stored on a password-protected drive that will be locked in the researcher's office.

LIMITATIONS OF THIS STUDY

As was previously mentioned, generalizability of this study is limited due to the nature of this mixed-method approach. Some other limitations of this study will now be discussed. First, the small numbers of self-selected students allowed in each course section constrained the number of potential participants (n=15; poetry course n=8, fiction course n=7), and thus may have provided survey and transcript data from a non-representative subset of the students. The researcher has sought to address this issue through the inclusion of additional sources of information about activity in the course. Furthermore, the researcher's direct access to students was limited because participation in the study was designed to be as unobtrusive as possible. Because the end-of-semester interviews were not mandatory for participation in research, only a small subset of each course opted in (two interview participants per course).

Two-course comparisons of message length, frequency, and other factors were limited due to the differences in structure represented by the fiction and poetry workshop

design, and students' choices to enroll in either course likely represent personal differences in approaches to writing. The content analysis portion of this research regards the message, which is influenced both by the instructor's requirements and choices made by the students, as the unit of analysis. While the formal nature of the single message offers high discriminate capability, a smaller, more flexible unit of analysis might have yielded a more nuanced analysis of social presence in the discussion transcripts. Because the coders of these messages were new to the practice, this unit of analysis was chosen to ensure that units could be consistently identified. Furthermore, because of the volume of discussion transcripts, limitations to the coders' time and location, and features of the coding software, they were able only to make one pass through the coding process. Adjudications of the validity of each coding decision were made by the researcher, based on discussions and memos from the coding process. Another pass at the content analysis and group refinement of the coding template, as Rourke and Anderson (2004) suggest, may have substantially increased inter-rater reliability measurement. This process is treated in detail in the next chapter.

While all "public" activity taking place in the online course environment was available to the researcher, for online behaviors and activities that take place outside the bounds of the online course the researcher relied on participants' own reports. Analysis of behavior in non-instructional environments addressed in the surveys was limited to comparisons based on participants' in-class activities in relation only to their perceptions of their external behavior and preferences. Further studies might compare information regarding actual online activities of participants gathered through ethnographic methods.

RESEARCHER'S STATEMENT

Both my professional interests and my personal experiences have drawn me to this particular research project. As an undergraduate English major with an interest in creative writing, I spent several semesters as a participant in face-to-face creative writing workshops. Additionally, in my professional work, I have had considerable experience working with the Blackboard course management system. I have used the system as a student in online classes, as an instructor of online classes, and as a systems administrator supporting teaching and learning with the system in a variety of disciplines.

These experiences have guided my approach to this research with some empathy and understanding, and my prior knowledge provided me with a broad understanding of normative behavior in environments similar to those being studied. However, I acknowledge that this prior experience could have served as a barrier to accurate analysis in the two courses within which this project is focused.

Through the methods described by Yin (2003), Stark (1995), and others, I sought to openly ask questions, honestly listen, and flexibly adapt to the circumstances of these cases, all the while seeking out and investigating alternative explanations and contradictions to my expectations. In my approach to this research, I sought to uncover my own biases, accommodate the unexpected, and avoid being driven by my preconceptions.

Yin (2003) notes the importance of exploring unexpected contradictory findings with others as a means of regulating one's own bias. In my analysis, I shared my data and interpretations with my committee, with the individuals involved in the case study, and with other colleagues to ensure that I am aware of a variety of interpretations.

Chapter 4: Quantitative Data Analysis

This chapter reports on quantitative analysis performed on data derived from a number of sources. This includes student demographic, media preference, and social presence perception data collected in the surveys, descriptive analysis of course management system usage, detailed reporting on the content analysis of discussion board transcripts, and analysis of social density, and message view counts.

The results of these analyses provide context for and will be referenced in the case reports in Chapter 5.

SURVEY RESPONSE ANALYSIS

Participants from both the fiction and the poetry courses were asked to complete six surveys: an incoming student survey early in the semester, four interstitial surveys during workshop weeks, and an exit survey at the conclusion of the semester. Due to incomplete survey data from a student participant who dropped the course between the initial survey and the first interstitial survey, calculations beyond the initial survey feature an $n=14$. Demographic characteristics here include all 15 original participants and contributions from all 15 participants—to the extent that they participated in the course—are included in the content analysis section later in this chapter.

In addition to providing descriptive information about the students, their feelings, perceptions, and habits, items on these surveys were included to explore research questions #1 (Do interaction traces affect perception of social presence among co-learners within asynchronous creative writing workshops?), #2 (How do learners respond to evidence of interaction and critique as expressed through interaction traces attached to content they have authored? Do their responses change over time?), and #3 (How do

learners' media preferences and online behaviors outside of instructional settings affect their behaviors in online creative writing workshops?).

Demographic Characteristics of Participants

As was mentioned in the previous chapter, potential participants in this study came from two online creative writing workshops, one focused on fiction and another focused on poetry, which are taught within the context of the part-time study program which is typically geared toward non-traditional students. However, during the long semesters, students from the University's full-time programs are also admitted. Additionally, each workshop contained students registered for a 200-level section and students who registered for a 400-level section and were accountable for slightly more work.

Of the 14 students who agreed to participate in this study, seven were registered for the fiction course, and eight were registered for the poetry course. Ten of the participants registered at the 200 level, which denotes having taken fewer total course hours at the university. Four students registered at the 400 level. Only two of the participants in this study were male (both in the Fiction course), of the 13 female participants, eight comprised all of the participants from the Poetry course.

The majority of participants in this study represent the traditional age for college students; ten reported their age range as 18 – 26 years. Of the remaining five participants, two reported their age range as 26 – 35 years, one reported 46 – 55 years, and two reported 56 – 65 years.

For the majority of students, the creative writing workshop was not their first online class. Six of the participants had taken one online class before, and three

participants had taken five or more online classes. For the remaining five students, the creative writing workshop was their first experience with online learning in a higher education setting.

All but one participant reported having internet access at home, and all but two reported they were able to access the internet while at their workplace.

The incoming survey additionally included questions investigating the different communication tools and technologies the students regularly used. Every participant indicated regular use of Email, twelve reported regular use of Text Messaging, nine reported regular use of Instant Messaging, four indicated regular use of Video Chat, three students indicated regular use of discussion forums, and both Twitter and blogs had two participants indicate regular use. In the free-form response area for this question, some participants clarified that the IM tool they used was Facebook Chat, some mentioned the use of other social networking sites like Orkut and LinkedIn, and one student that the only discussion forums and blogs she used had been in online classes. These demographic data are summarized in the table below.

Characteristics of Participants			
Characteristic	Measurement	# of Participants	% of Participants
Course Level	200	11	73.3
	400	4	26.6
Gender	Male	2	13.3
	Female	13	86.7
Age Group	18 – 25	10	66.7
	26 – 35	2	13.3
	36 – 45	0	0
	46 – 55	1	6.7
	56 – 65	2	13.3
	Over 65	0	0
	Number of online classes taken	This is my first	6
I have taken one		6	40
I have taken two		0	0
I have taken three		0	0
I have taken four		0	0
I have taken five +		3	20
Internet Access at Home	Yes	14	93.3
	No	1	6.7
Internet Access at Work	Yes	13	86.7
	No	2	13.3
Regularly uses tool or technology	Email	15	100
	Instant Messaging	9	60
	Text Messaging	12	80
	Discussion forums	3	20
	Video Chat	4	26.6
	Twitter	2	13.3
	Blogs	2	13.3
Course	Fiction	7	46.7
	Poetry	8	53.3

Table 3. Characteristics of Participants

Social Media and Interaction Traces Questions

The incoming survey also included five-point Likert scale items inquiring into the students perceived technology skills (item #9), use of social media and social networking sites and the active and passive behaviors they engage in during their visits to such sites (items #10 through #17). Percentages of student responses for these items are summarized in the table (Table 4) below.

Responses to Social Media and Interaction Traces Questions						
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know
I consider my computer/internet skills to be about average.	0% (0)	6.7% (1)	0% (0)	60% (9)	33.3% (5)	0% (0)
I use one or more social networking websites (like Facebook, MySpace, LinkedIn, MeetUp.com, Classmates.com) regularly.	0% (0)	6.7%(1)	0% (0)	60% (9)	33.3% (5)	0% (0)
I use one or more social media websites (like YouTube.com, Flickr, Picasa, Twitter, Blogger, LiveJournal) regularly.	0% (0)	13.3% (2)	13.3% (2)	53.3% (8)	20% (3)	0% (0)
I often post my own writings, photos, videos, or other creative work on social media sites.	6.7% (1)	26.7% (4)	13.3% (2)	46.7% (7)	0% (0)	6.7% (1)

I often write comments on writings, photos, videos, or other creative work posted by others on social media sites.	0% (0)	6.7% (1)	20% (3)	60% (9)	13.3% (2)	0% (0)
I often tag writings, photos, videos, or other creative work posted by others with descriptive keywords on social media sites.	0% (0)	26.7% (4)	40% (6)	33.3% (5)	0% (0)	0% (0)
I often provide ratings (in the form of 1-5 stars, for example) for writings, photos, videos, or other creative work posted by others on social media sites.	13.3% (2)	40% (6)	33.3% (5)	13.3% (2)	0% (0)	0% (0)
I pay attention to the activities of others social media sites.	0% (0)	6.7% (1)	26.7% (4)	60% (9)	6.7% (1)	0% (0)
I pay attention to the popularity of videos, images, or other media on social media websites.	6.7%(1)	0 (0)	33.3% (5)	46.7% (7)	6.7% (1)	6.7% (1)

Table 4. Responses to Social Media and Interaction Traces Questions

Initial Social Presence Survey Data

The incoming survey also included relevant five-point Likert scale items drawn from a survey developed in previous studies using the Community of Inquiry Framework (Swan, et al., 2008 is a recent example), specifically from the Social Presence section of that instrument (items #18 through #28 on the initial survey). Percentages of student responses for these items are summarized in the table (Table 5) below.

Responses to Social Presence Items on Incoming Survey						
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know
Online or web-based communication is an excellent medium for social interaction.	0% (0)	6.7%(1)	26.7% (4)	33.3% (5)	33.3% (5)	0% (0)
I am able to form distinct impressions of other users through their activities on social media sites.	0% (0)	20% (3)	26.7% (4)	46.7% (7)	6.7%(1)	0% (0)
Getting to know other course participants gave me a sense of belonging in the course.	0% (0)	0% (0)	26.7% (4)	53.3% (8)	13.3% (2)	6.7% (1)
I was able to form distinct impressions of some course participants.	0% (0)	6.7%(1)	33.3% (5)	40% (6)	13.3% (2)	6.7% (1)
I felt comfortable conversing through the online course.	0% (0)	6.7% (1)	20% (3)	60% (9)	13.3% (2)	0% (0)
I felt comfortable participating in the course discussions.	0% (0)	6.7%(1)	13.3% (2)	46.7% (7)	26.7% (4)	6.7% (1)

I felt comfortable interacting with other course participants.	0% (0)	0% (0)	20% (3)	73.3% (11)	6.7% (1)	0% (0)
I felt comfortable disagreeing with other course participants while still maintaining a sense of trust.	0% (0)	0% (0)	20% (3)	66.7% (10)	6.7% (1)	6.7% (1)
I felt that my point of view was acknowledged by other course participants.	0% (0)	0% (0)	26.7% (4)	60% (9)	6.7% (1)	6.7% (1)
Online discussions help me to develop a sense of collaboration.	0% (0)	6.7% (1)	26.7% (4)	53.3% (8)	13.3% (2)	0% (0)

Table 5. Responses to Social Presence Items on Incoming Survey

Responses to Incoming Survey By Course Type

Non-parametric tests were performed to determine whether there were significant differences (at $p = .05$) between the participants who registered for the different courses in the incoming and outgoing surveys. Significant differences were found for three survey items.

A Mann Whitney U test on Incoming Survey Question #28 indicated that participants who registered for the poetry course felt that online discussions helped them

to develop a sense of collaboration to a higher degree than did participants who registered for the fiction course, $U = 7.500$, $z = -2.442$, $p = .015$, $r = -.65$.

A Mann Whitney U test on Outgoing Survey Question #4 indicated that participants who completed the poetry course reported more frequent use of social media sites than did participants who completed the fiction course, $U = 4.00$, $z = -2.808$, $p = .005$, $r = -.75$.

A Mann Whitney U test on Outgoing Survey Question #8 indicated that participants who completed the poetry course reported that they register ratings for content posted to social media sites more frequently than did participants who completed the fiction course, $U = 8.00$, $z = -2.194$, $p = .028$, $r = -.58$.

Interstitial Surveys & Exit Surveys

In order to explore whether how learners respond to interaction traces changes over time (RQ2); non-parametric tests (Friedman's ANOVA) for multiple related samples were performed on the dual-course dataset as a whole ($N=14$, as the student who dropped the course did not complete enough surveys to be considered a complete case). Significant differences among between time points were discovered in three cases, detailed below.

A Friedman's ANOVA test on responses to interstitial survey question #8 (& exit survey question #17) revealed significant differences among participants' reports of whether they read others' discussion board postings after they posted their own responses in workshop threads ($\chi^2 = 12.380$, $p = .015$). Wilcoxon tests were conducted to further examine this difference. The post-hoc tests revealed significant differences between responses to the item on the first survey ($Mdn = 4.00$) and the second ($Mdn = 2.50$)

interstitial surveys ($T = 1.50, p = .034, r = -.58$), the second and the third ($Mdn = 4.00$) surveys ($T = 0, p = .042, r = -.56$), and the second and the final ($Mdn = 4$) surveys ($T = 0, p = .011, r = -.70$). These differences represent that, after a decrease in student reports of whether they went back through threads to read others' postings after they posted their own responses following the first interstitial survey, participants reported an increase in their post-response reading of others' messages within the workshop thread.

A Friedman's ANOVA test on responses to interstitial survey question #9 (& exit survey question #18) revealed significant differences among participants' reports of whether they read others' discussion board postings before they posted their own responses in workshop threads ($\chi^2 = 14.122, p = .007$). Wilcoxon tests were conducted to further examine this difference. The post-hoc tests revealed significant differences between responses to the item on the first ($Mdn = 4.00$) and the second ($Mdn = 3.00$) interstitial surveys ($T = 0, p = .017, r = -.66$), the second and the third ($Mdn = 4.00$) surveys ($T = 0, p = .035, r = -.70$) and the first and the fourth ($Mdn = 4.00$) surveys ($T = 4.00, p = .035, r = -.58$).

A Friedman's ANOVA test on responses to interstitial survey question #10 (& exit survey question #19) revealed significant differences among participants' reports of whether they felt others in the course had read their posts ($\chi^2 = 11.250, p = .024$). Again, Wilcoxon tests were conducted to further examine this difference. The post-hoc tests revealed significant differences between responses to the item on the second interstitial survey ($Mdn = 3.00$) and the final survey ($Mdn = 4.00$) ($T = 8.00, p = .039, r = -.57$).

Media Preference Composite Scores

A Media Preference Composite score was created to explore whether learners' media preferences outside the online classroom affect their behaviors and perceptions in the online writing workshops (RQ3). The composite scores were calculated by averaging the social media use items on the incoming survey (items #9 through #15 on the incoming survey) and a tool score, which was calculated based on responses to the communication tools item (#8). Participants tool scores represented the number of communications tools they indicated regular use (Instant Messaging, Email, Discussion Forums, Text Messaging, Video chat). Media preference composite scores were determined to be normally distributed using the Shapiro-Wilk test. Details of the Media Preference Composite Score can be found in the following table.

Media Preference Composite Scores	
Mean	3.43
Median	3.43
SD	.586
Min - Max	2.29 - 4.71

Table 6. Details of the Media Preference Composite Score

Based on the Media Preference composite scores, participants were placed into one of two groups High MP (N=8) and Low MP (N=6), based on whether they fell above or below the median score. Once these groups were created, tests were performed to explore whether there were differences in how the students in the High MP and Low MP groups reporting behaving and perceiving the behaviors of others in the online class environment.

Media Preference Composites: Differences in Responses to Social Presence Survey Items

Non-parametric tests were performed to determine whether there were significant differences between the participants in the High MP and Low MP groups. Significant differences were found for four survey items, all of which appeared on the final survey.

A Mann Whitney U test on the final survey item inquiring whether participants were able to form distinct impressions of other users through their activities on social media sites (item #12) indicated that participants in the High MP group reported stronger agreement with the statement at a significantly higher degree than did participants in the Low MP group, $U = 8.00, z = -2.322, p = .020, r = -.62$.

A Mann Whitney U test on the final survey item investigating whether participants felt they posted more than was required in the workshop threads (item #14) indicated that participants in the High MP group reported stronger agreement with the statement at a significantly higher degree than did participants in the Low MP group, $U = 9.00, z = -2.322, p = .040, r = -.54$.

A Mann Whitney U test on the final survey item inquiring whether participants were able to form distinct impressions of other users through their activities within the online course (item #15) indicated that participants in the High MP group reported stronger agreement with the statement at a significantly higher degree than did participants in the Low MP group, $U = 10.00, z = -2.139, p = .032, r = -.57$.

A Mann Whitney U test on the final survey item investigating whether participants felt most others in the course had read the messages they posted (item #19) indicated that participants in the High MP group reported stronger agreement with the statement at a significantly higher degree than did participants in the Low MP group, $U = 5.00, z = -2.272, p = .023, r = -.61$.

Media Preference Composites: Changes in Survey Item Responses over time

For the Low MP group, no significant differences among responses over time on the common survey items were identified though Friedman's ANOVA. For the High MP group, two significant differences, the Friedman's tests identified two items on which participants' responses significantly differed over the course of the semester.

Reports of reading others' postings after they themselves had responded to a poem or story in a workshop thread were revealed to have differed significantly for students in the High MP group ($\chi^2 = 11.397, p = .022$). Post-hoc analysis using the Wilcoxon test revealed that differences between responses to the item on the second interstitial survey ($Mdn = 2.50$) and the final survey ($Mdn = 4.00$) were the source of this difference ($T = 0, p = .042, r = -.76$). These results indicate that students in the High MP group felt that they read more of their peers' postings in the discussion board at the end of the course than they did in the second week of the workshop.

Perceptions of whether most of their peers read the messages they posted in the workshop threads also differed for High MP group participants. A Friedman's test of item #10 on the interstitial surveys (#19 on the exit survey) revealed a significant difference over the course of the semester ($\chi^2 = 10.154, p = .038$). Post-hoc analysis using the Wilcoxon test identified differences between responses to the item on the second interstitial survey ($Mdn = 4.00$) and the final survey ($Mdn = 5.00$) as the source of this difference ($T = 0, p = .026, r = -.79$). These results indicate that students in the High MP group also felt that their peers read more of their postings at the end of the course than they did in the second week of the workshop.

Social Presence Composite Scores

Following Swan and Shih's (2005) example, a Social Presence Composite score was created to explore whether interaction traces affect perception of social presence among co-learners within the creative writing workshops (RQ1). The composite scores were calculated by averaging the social presence items on the incoming survey (items #16, #18, #19, and #21 through #27 on the incoming survey). Social Presence composite scores were determined to be normally distributed using the Shapiro-Wilk test. Details of the Social Presence Composite Score can be found in the following table.

Social Presence Composite Scores	
Mean	3.84
Median	3.90
SD	.434
Min - Max	3.10 - 4.60

Table 7. Details of the Social Presence Composite Score

Based on the Social Presence composite scores, participants were placed into one of two groups High SP (N=8) and Low SP (N=6), based on whether they fell above or below the median score. Once these groups were created, tests were performed to explore whether there were differences in how the students in the High SP and Low SP groups reporting behaving and perceiving the behaviors of others in the online class environment.

Social Presence Composites: Differences in Responses to Survey Items

Non-parametric tests were performed to determine whether there were significant differences between the participants in the High SP and Low SP groups on the incoming

and final surveys, excluding the social presence items upon which the composite scores were based. Significant differences were found for four survey items, two items from the incoming survey and two from the final survey.

A Mann Whitney U test on the incoming survey item inquiring whether participants regularly commented on writings, photos, videos or other creative work posted by others to social media sites (item #13) indicated that participants in the High SP group reported stronger agreement with the statement at a significantly higher degree than did participants in the Low SP group, $U = 9.00, z = -2.274, p = .023, r = -.67$.

A Mann Whitney U test on the incoming survey item inquiring whether participants regularly submitted ratings of writings, photos, videos or other creative work posted by others to social media sites (item #15) indicated that participants in the High SP group reported stronger agreement with the statement at a significantly higher degree than did participants in the Low SP group, $U = 7.00, z = -2.394, p = .021, r = -.71$.

A Mann Whitney U test on the final survey item investigating whether participants felt they posted more than was required in the workshop threads (item #14) indicated that participants in the High SP group reported stronger agreement with the statement at a significantly higher degree than did participants in the Low SP group, $U = 3.50, z = -2.802, p = .005, r = -.83$.

A Mann Whitney U test on the final survey item investigating whether participants felt most others in the course had read the messages they posted (item #19) indicated that participants in the High SP group reported stronger agreement with the statement at a significantly higher degree than did participants in the Low SP group, $U = 5.00, z = -2.272, p = .023, r = -.61$.

Social Presence Composites: Changes in Survey Item Responses over time

Responses from both the Low SP group and the High SP group were shown to be significantly different when Friedman's test was applied to items on the weekly and final surveys.

In the High SP group, participant responses to the question regard whether they had posted more than was required (item #1 on the interstitial surveys, #14 on the final survey) were found to have differed significantly over time ($\chi^2 = 9.538, p = .049$). Post-hoc analysis of these responses using the Wilcoxon test revealed a significant difference in responses between the item on the fourth interstitial survey ($Mdn = 3.00$) and the final survey ($Mdn = 4.50$) ($T = 0, p = .024, r = -.80$). These results indicate that students in the High SP group felt that they read more of their peers' postings in the discussion board at the end of the course than they did in the week of the fourth workshop survey.

Responses to the item investigating whether participant perception that messages they posted were read by their peers also differed significantly in a Friedman's test ($\chi^2 = 10.800, p = .029$). The subsequent Wilcoxon tests revealed significant differences between responses to the item on the second interstitial survey ($Mdn = 4.50$) and the final survey ($Mdn = 4.50$) ($T = 0, p = .041, r = -.77$). These results indicate that students in the High SP group felt that their peers read more of their postings at the end of the course than they did in the second week of the workshop.

In the Low SP group, a number of significant differences were also identified. Low SP participants expressed different levels of comfort participating in course discussion over the course of the semester (item #24 on the incoming survey, #1 on the interstitial surveys) ($\chi^2 = 12.198, p = .016$). Subsequent Wilcoxon tests identified significant differences between responses in the second ($Mdn = 4.50$) and the fourth interstitial surveys ($Mdn = 4.00$) ($T = 0, p = .046, r = -.81$), as well as the incoming

survey ($Mdn = 4.00$) and the first interstitial survey ($Mdn = 5.00$) ($T = 0, p = .034, r = -.87$), and the incoming survey and the third interstitial survey ($Mdn = 4.00$) ($T = 0, p = .046, r = -.81$). These results indicate that Low SP participants' comfort levels shifted upward after the initial weeks of the course, but dropped in the following workshop weeks.

The reading-related questions (#8 & #9 on the interstitial surveys, #17 & 18 on the final survey) also elicited different responses from the Low SP group over the course of the semester.

A Friedman's test on responses to the item investigating whether participants returned to a thread to read their peers' messages after they themselves had posted revealed significant differences ($\chi^2 = 11.051, p = .026$). However, subsequent Wilcoxon tests revealed no significant difference between paired weeks.

A Friedman's test on responses to the item investigating whether participants felt they had read most of a workshop thread's postings also revealed significant differences ($\chi^2 = 10.923, p = .027$). Wilcoxon tests revealed significant differences among responses in the second interstitial survey ($Mdn = 2.50$) and the third ($Mdn = 4.00$) ($T = 0, p = .034, r = -.87$). These results indicate that the Low SP participants felt that they read more of their peers' postings in the discussion board during the week of the third interstitial survey than they did in the week of the second workshop survey.

DESCRIPTIVE ANALYSIS OF COURSE MANAGEMENT SYSTEM USAGE

The course management system provides usage information documenting student access to different content areas within a course and discussion forum activity by students. Reports of course management system usage were generated to determine the

access and posting habits of participants in each of the two courses studied in this dissertation.

In the fiction course, 87% of course access by study participants was in the Discussion board, with the remaining 13% in the content areas which contained the course syllabus and workshop and lecture schedules, workshop guidelines, prompts for weekly exercises (also posted to the discussion board) and supplemental course readings.

In the poetry course, 88% of participant access was to the course discussion board, with the remaining 11% of access in content areas containing the course syllabus, the workshop and lecture schedules, bi-weekly prompts for student poems, and workshop guidelines. No supplemental readings were shared in the course documents content area for the poetry course.

The Discussion board of each course was the only area in which students had both read and write access to the course management system. The other content areas in use of the courses (Course Documents, Course Information, Assignments) contained only messages written by the instructor. Some of the materials posted in these areas will be covered in the next chapter, but the focus of this analysis will be the Discussion Board, where the bulk of activity in the course occurred.

Posting Activity in the Discussion Board

Within the discussion board, the average number of messages posted by a participant over the course of the semester in the poetry course was 41.38; in the fiction course, which featured fewer workshop threads in which posting was mandatory, the average number of messages posted by a participant over the course of the semester was 34.14.

The average posts made by participants in specific weeks during the semester fluctuated considerably. Average posts per week by participants in both courses are detailed in Table 8 below. These raw data from the course management system include counts of messages posted by study participants in response to a non-participating student’s creative work. Such messages were not included in the Reading and Viewing of Individual Posts and Content Analysis of Discussion Transcripts sections below, which features a slightly lower number for total messages per course.

Weekly Post Totals and By-Participant Post Averages				
	Fiction Course		Poetry Course	
	Total Posts during week	Average Posts by Participant during week	Total Posts during week	Average Posts by Participant during week
Week 1	9	1.29	16	2.00
Week 2	14	2.00	11	1.38
Week 3	15	2.14	57	8.14
Week 4	15	2.14	57	8.14
Week 5	14	2.00	10	1.43
Week 6	17	2.43	39	5.57
Week 7	19	2.71	31	4.43
Week 8	17	2.43	6	0.86
Week 9	9	1.29	25	3.57
Week 10	28	4.00	42	6.00
Week 11	15	2.14	9	1.29
Week 12	18	2.57	29	4.14
Week 13	1	0.14	10	1.43
Week 14	9	1.29	27	3.86
Week 15	17	2.43	10	1.43
Week 16	1	0.14	0	0.00

Table 8. Weekly Post Totals and By-Participant Post Averages in the Fiction and Poetry Course Discussion Boards

The number of posts in a given week is a partial indication of the level of activity within the course environment during that week. A two-course comparison of these post

counts reveals a few weeks in which posting activity by participants were at different levels between the two similarly-structured courses. Trend lines in the chart below (Figure 9) indicate both considerably more posting activity in early weeks of the poetry course and a more dramatic change in posting activity by week than was present in the fiction course. After week eight, when participants in the poetry course posted messages at the lowest rate all semester (week sixteen was the week following the last class day), both courses followed a similar posting activity pattern until the conclusion of the semester.

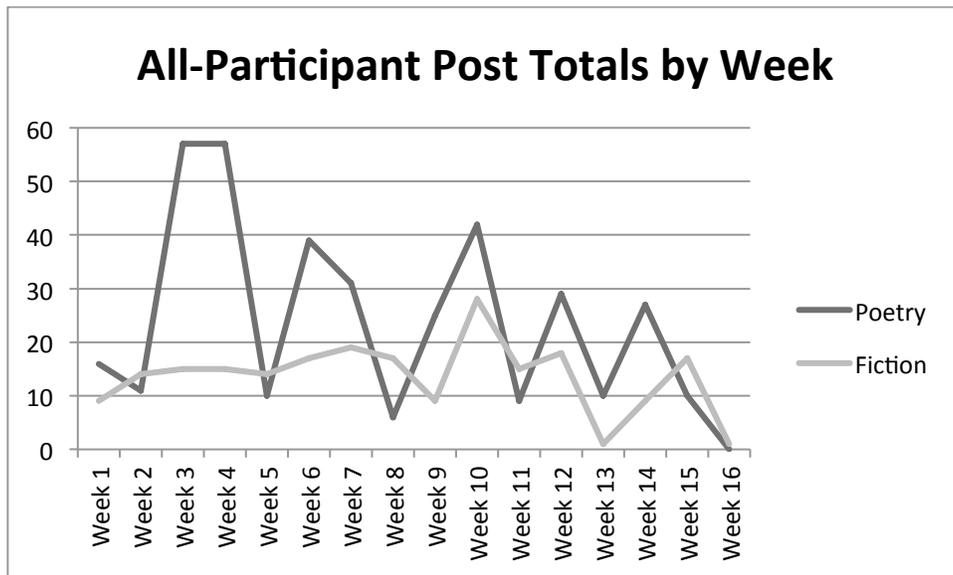


Figure 9. All-Participant Post Totals by Week for the Poetry and Fiction Courses

Weekly Posting Patterns

Posting habits over the course of the week were also slightly different among participants in the fiction and poetry courses. Some of the highest post in rates occurred

on Sundays (poetry: 24%; fiction: 38%), when students' responses to the week's poems or stories were due, and Mondays (poetry: 24%; fiction: 15%), when new creative work was posted for consideration and comment over the next week. However, the highest percentage of posts in the poetry course fell on Tuesdays, a day without a syllabus-related weekly milestone, and mid- to late-week posting percentages were considerably lower than the Sunday, Monday, and Tuesday percentages. That three-day period accounted for 74% of messages in the discussion board. Posting activity by day in the poetry course is illustrated in Figure 10 below.

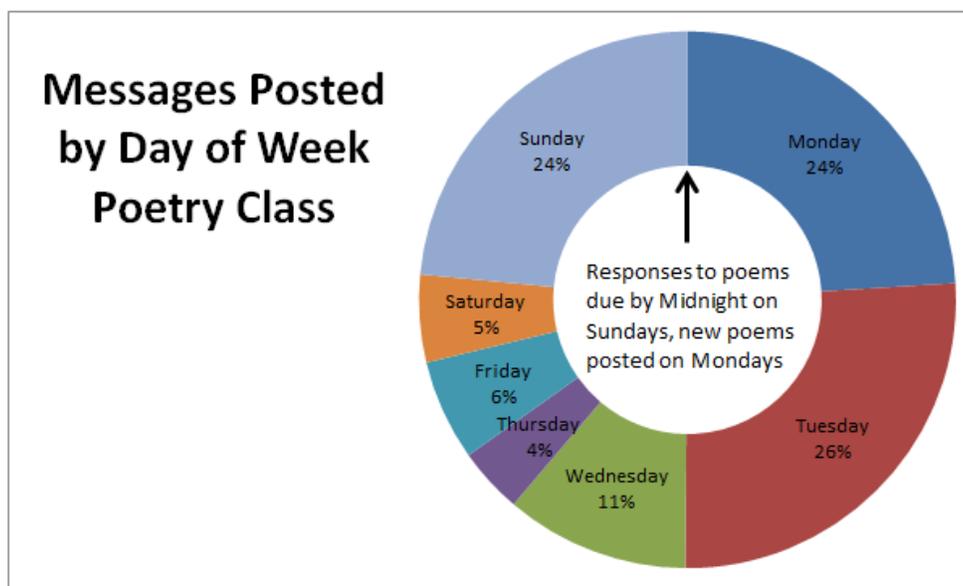


Figure 10. Messages Posted by Day of Week: Poetry Course

In the fiction course, participants posted messages on Saturday at the same volume as they did on Monday (15%), but that percentage is more than doubled by the 38% of messages posted on Sundays. Posting on Tuesday through Friday was relatively flat, at 7-9%. Unlike the poetry course, participants in the fiction course were most active

during the weekends, and their activity dropped off after Monday, when new stories were posted. Again, however, three consecutive days accounted for a vast majority of posting activity in the course—Saturday, Sunday, and Monday, combined, represent 68% of participants’ posts. Posting activity by day in the fiction course is illustrated in Figure 11 below.

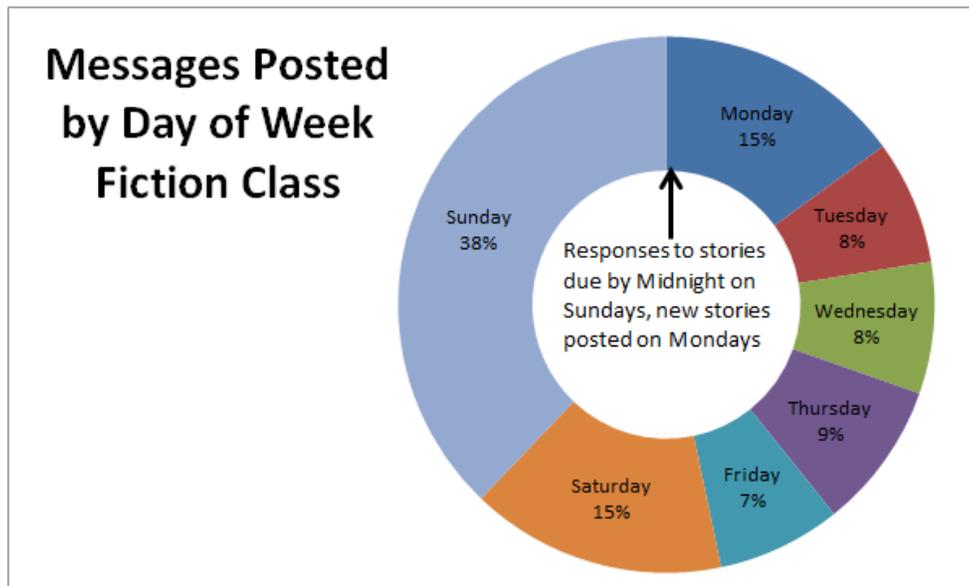


Figure 11. Messages Posted by Day of Week: Fiction course

Posting and Reading Messages within the Discussion Forums

In both the fiction and the poetry courses, the instructor created separate forums for the different type of student activity she expected in the discussion board. Six forums were created in advance of the semester to serve as locations for the different type of work being performed by students in the discussion board:

- A Workshop forum where student sharing and peer review of creative work took place. At least one post per story or poem in this thread was required.
- A Discussion and Lecture Forum in which the instructor posted questions or brief written lectures and expected students to respond.
- An Exercises forum where students completed exercises related to topics covered in course readings and lectures.
- A forum in which students in the 400-level courses could post their lecture assignments. Student response to these lectures was not mandatory.
- A Miscellaneous thread in which the instructor invited students to ask questions, share observations, or discuss topics not necessarily related to the course content or assignments.
- A Final forum to submit and share final versions of creative work at the end of the semester.

The forums were named slightly differently between the two courses, and, as evidenced by the numbers of threads, posts, and accesses, were used differently in the two courses.

Though the course management system does not provide information about the length of time participants spend on a particular message, or any indication of the activity in which they were engaged when they visited it (i.e., reading the screen, posting a message, downloading attachments, copying and pasting), accessing a thread within a forum is considered “reading” for the purpose of this study.

Among the six forums, the total number of threads in the fiction course in which study participants posted messages (excluding messages posted to the creative work of non-participants) was 31, and within these 31 threads, participants posted 221 messages.

Numbers of threads within each forum, and the average number of posts by participants in those threads are detailed in Table 9 below. The average number of posts was highest in the Exercises forum, in which students responded to a prompt by the instructor, and, in turn, the instructor posted comments on each individual's contribution. The forum with the lowest average number of posts per thread was the final revised stories forum, in which students posted their stories, but did not garner a response in the thread from the instructor or the other students.

Also detailed in Table 9 is summary information about how often threads and messages in the forum were accessed by participants in the study. This data does not relate to individual threads or messages within a forum, but demonstrates the relative amount of attention the different forums received—these totals include the number of times students visited the forum to post a message of their own or to read the messages of others. The Workshop forum received over 60% of the visits to any forum within the course management system in the fiction course, and at less than 1% of all visits, the miscellaneous forum received the least. The Exercises forum received the second highest number of visits at nearly 22%.

Number of Threads, Average Participant Posts, and Participant Access, Fiction				
Course Forum	Number of threads	Average posts per thread	Number of Accesses by Participants	Percentage of Accesses by Participants
Fiction	31	7.12	2901	100.00%
Workshop	7	9.71	1759	60.63%
Exercises	6	16.50	626	21.58%
Discussion/Lectures	5	7.60	352	12.13%
Final Revised Stories	7	1.00	76	2.62%
Advanced Lectures by Advanced Students	5	1.40	61	2.19%
Questions, Miscellaneous Observations, Love Notes	1	2.00	27	0.93%

Table 9. Number of Threads, Average Participant Posts, and Participant Access in Each Forum.

In the poetry course, the total number of threads in which study participants posted messages (excluding messages posted to the creative work of non-participants) was 58, and participants posted a total of 310 messages. Numbers of threads within each forum, and the average number of posts by participants in those threads are detailed in Table 10 below. At 7.71, the average number of posts was highest in the Workshop of Poems forum, in which students were required to respond at least once to every poem posted. Again, the forum with the lowest average number of posts per thread was the final revisions forum, in which students posted their revised poetry portfolios, but only received feedback from another participant in one case.

The workshop forum received nearly 80% of the visits to any forum within the course management system in the poetry course, and at less than 1% of all visits, the Lectures by Advanced Students forum received the least. Unlike the fiction course, in

which the Exercise forum was the location of considerable participant activity, no other forum in the poetry course received more than 10% of participant traffic.

Number of Threads, Average Participant Posts, and Participant Access, Poetry				
Course Forum	Number of threads	Average posts per thread	Number of Accesses by Participants	Percentage of Accesses by Participants
Poetry	58	6.08	5429	100.00%
Workshop of Poems	28	7.71	4331	79.78%
Discussions/Lectures	8	6.38	515	9.49%
Bio Exercise	8	1.75	219	4.03%
Miscellaneous Musings and Thoughts	5	3.40	201	3.70%
Final Revised Poems: Portfolio	7	1.29	122	2.25%
Lectures By Advanced Students	2	1.50	41	.076%

Table 10. Number of Threads, Average Participant Posts, and Participant Access in Each Forum.

In both cases, these data illustrate that participants visited the discussion forums in much higher volume for viewing and reading than for writing or posting messages—the vast majority of threads feature fewer than 20 messages, but even for the forums in which threads consisted of a single post, the number of accesses well exceeds, sometimes by several multiples, the number of messages posted in the forum.

Reading and Viewing of Individual Posts

Data were also collected illustrating the number of views each single post received. This data includes all student and instructor views. For each message in the

discussion board, this number of views was displayed within the message header, alongside a posting's author, title, and dates submitted and edited.

Because this number increments each time a user visits a message, initial messages in thread receive considerably more views than those later in the thread—in the default view, every user must click the title of the initial message to access the rest of the posts (and to post their own) in the thread. For this reason, apart from Table 11 and Figures 12 and 13 below, representations based on data drawn from post and thread views excludes views associated with a thread's initial post.

Overall, threads in the poetry course amassed a slightly higher average number of views (22.85) than threads in the fiction course (20.31). Initial posts accounted for 39% of views in the fiction course and 32% of total views in the poetry course. When adjusted to exclude views of initial posts, the gap between the courses increases a bit, from a difference 2.54 of views per post to a difference of 3.22 views per post. All of this suggests that poetry course participants visited subsequent posts in each thread more frequently.

Overall Thread Views By Course			
Course	Total Views	Total Posts	Average Views Per Post
Fiction	4489	221	20.31
Poetry	7062	309	22.85

Table 11. Overall Thread Views By Course.

Adjusted Thread Views By Course (initial posts removed)			
Course	Total Views	Secondary Posts	Average Views Per Post
Fiction	2361	190	12.43
Poetry	3929	251	15.65

Table 12. Adjusted Thread Views By Course.

When the average views per thread for each course are viewed consecutively, it is clear that threads nearer to the start of the course accumulated more views, and, for most threads, that the number of views tapered off as the course progressed (figures 12 and 13).

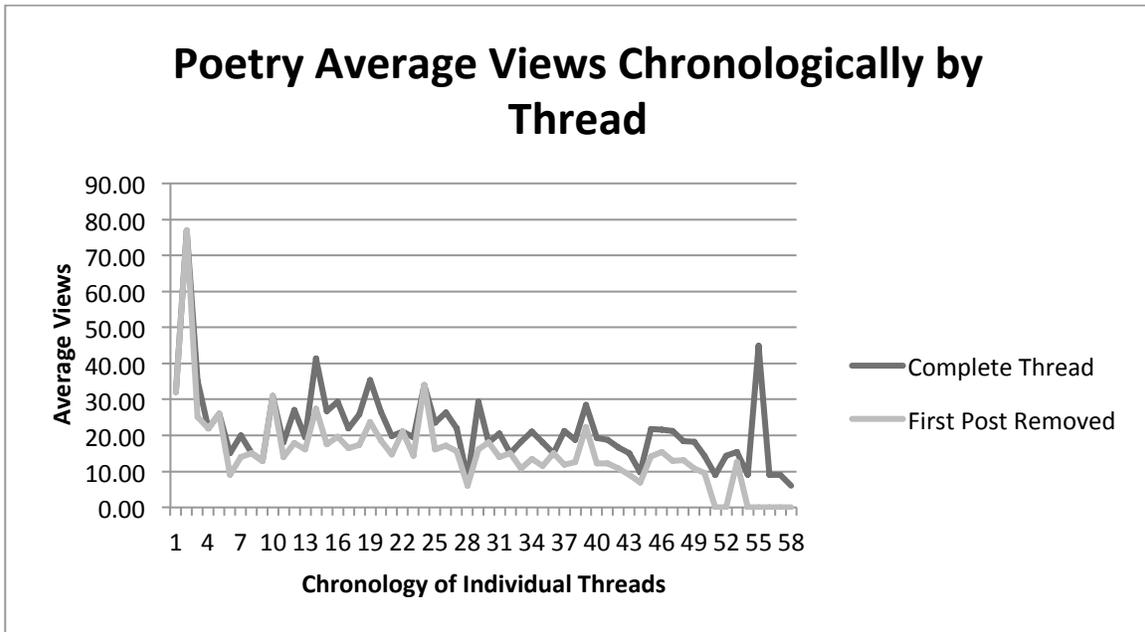


Figure 12. Poetry Average Views Chronologically by Thread

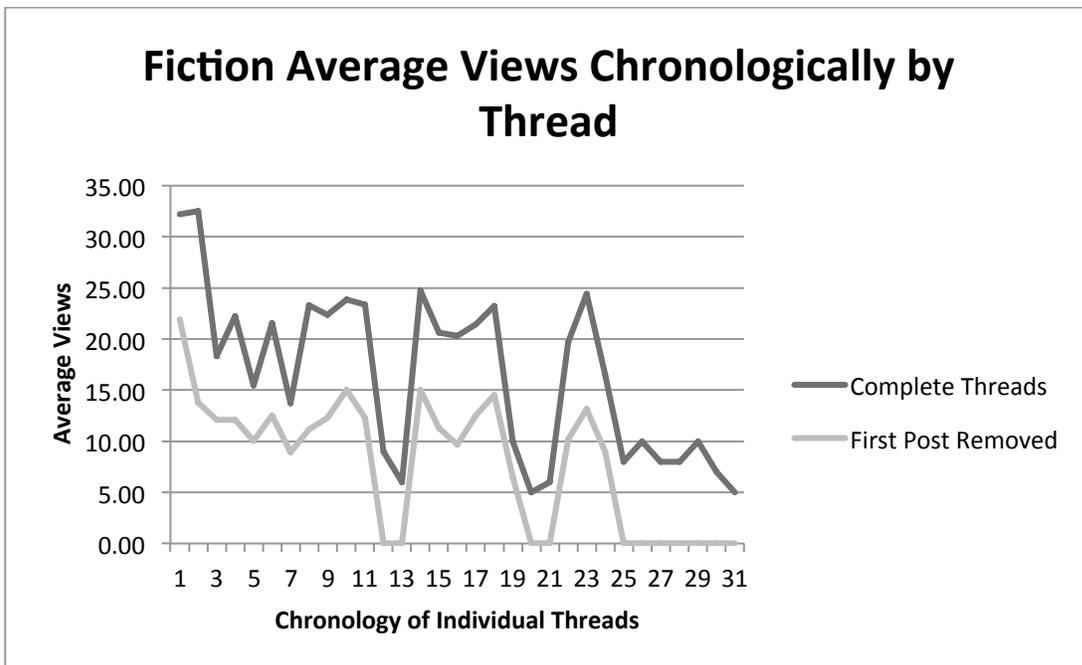


Figure 13. Fiction Average Views Chronologically by Thread

Furthermore, the threads themselves reflect this decay in views over time as well. Figures 14 through 20 below represent the distribution of views for each post within each forum type for each course. Included in these charts are only those threads containing three or more postings. The number of participant posts in these threads ranged from 3 to 25 for the fiction course and from 3 to 20 for the poetry course. The number and sequence of posts are represented on the horizontal axis in these graphs. Total views per post are indicated on the vertical axis. (Because the poetry workshop forum included 28 separate threads, that forum is represented in three separate graphs, with threads grouped chronologically.)

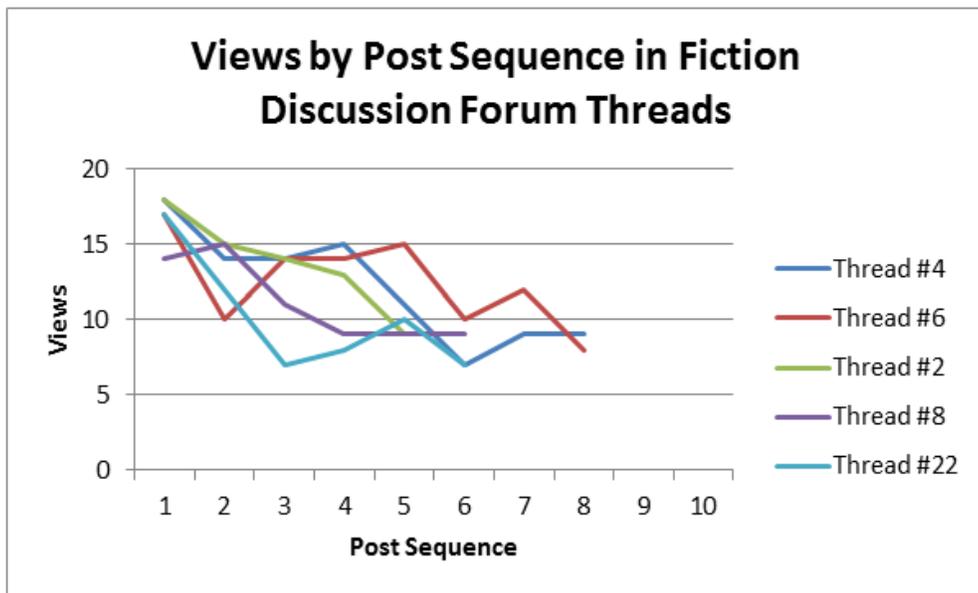


Figure 14. Views by Post Sequence in Fiction Discussion Forum Threads (Threads with >3 posts, first post removed)

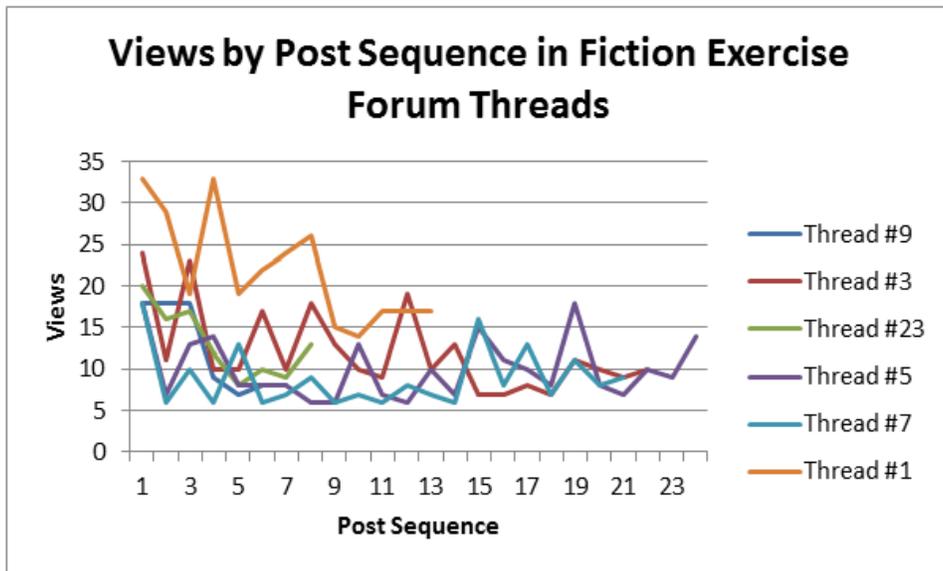


Figure 15. Views by Post Sequence in Fiction Exercise Forum Threads (Threads with >3 posts, first post removed)

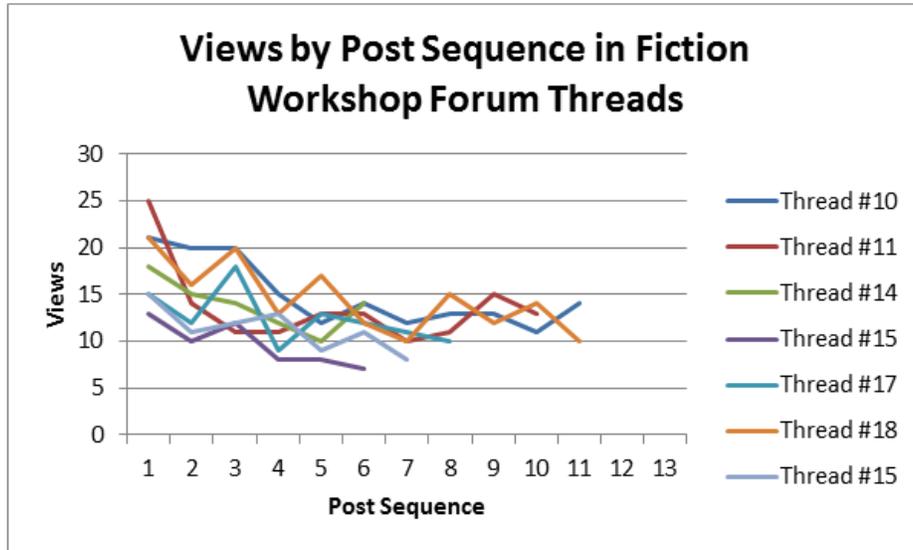


Figure 16. Views by Post Sequence in Fiction Workshop Forum Threads (Threads with >3 posts, first post removed)

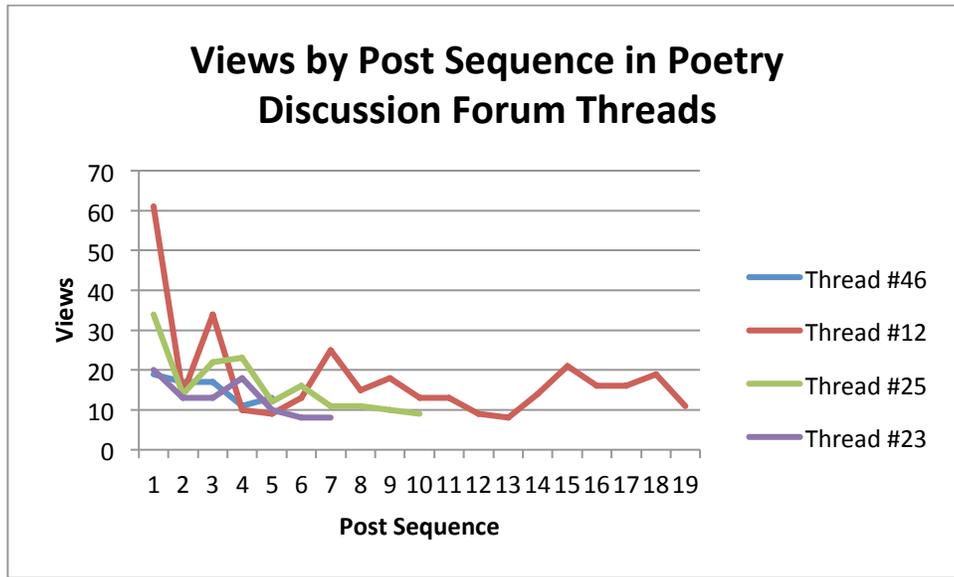


Figure 17. Views by Post Sequence in Poetry Discussion Forum Threads (Threads with >3 posts, first post removed)

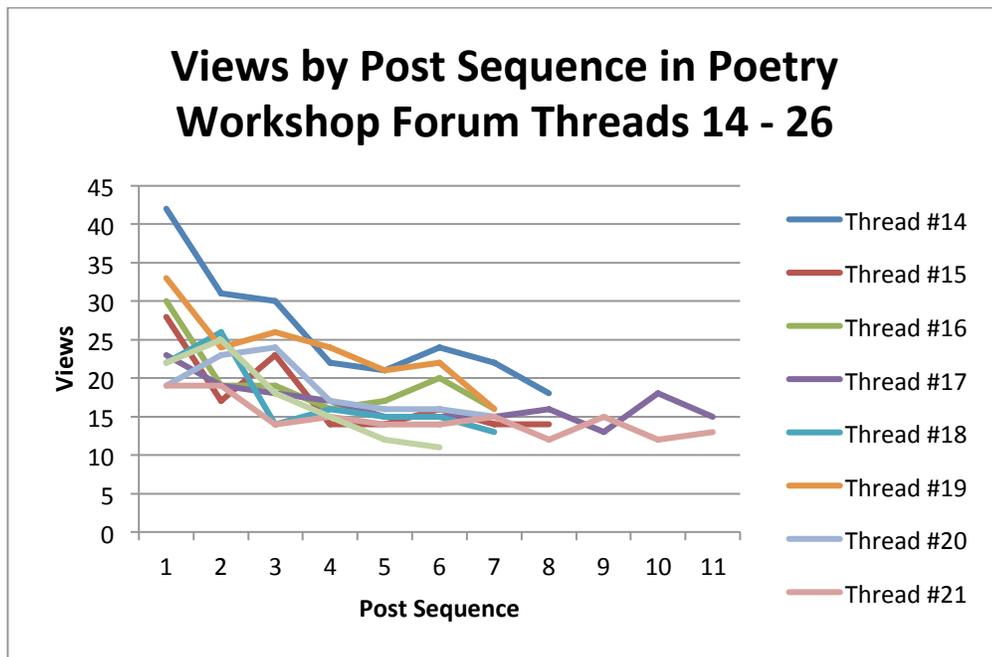


Figure 18. Views by Post Sequence in Poetry Workshop Forum Threads 14 - 26 (Threads with >3 posts, first post removed)

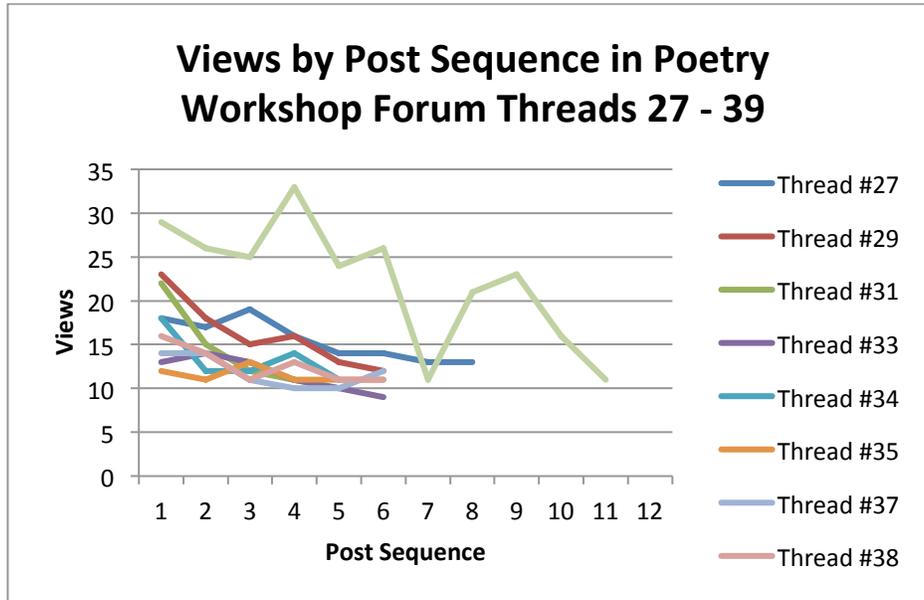


Figure 19. Views by Post Sequence in Poetry Workshop Forum Threads 27 - 39 (Threads with >3 posts, first post removed)

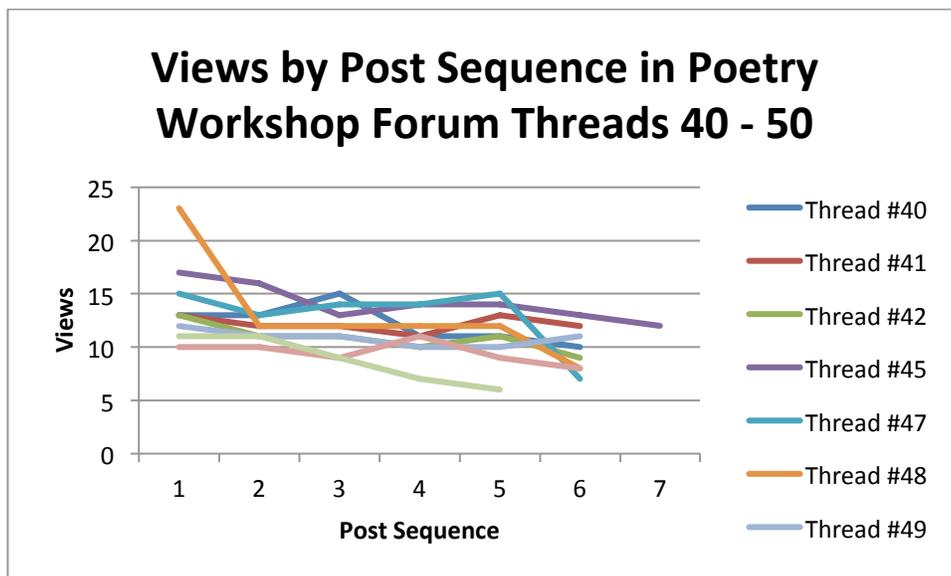


Figure 20. Views by Post Sequence in Poetry Workshop Forum Threads 40 - 50 (Threads with >3 posts, first post removed)

In all cases, the final post in the thread has been viewed considerably fewer times than the earliest posts in the thread sequence, even when the heavily viewed initial posts are removed. In most cases, the view numbers on later postings within a thread reveal that many, and often a majority, of students in the course did not view all of the postings in each thread.

CONTENT ANALYSIS OF DISCUSSION TRANSCRIPTS

In order to assess the social presence expressed in the courses' discussion transcripts, the researcher and two coders undertook a content analysis process based on the work of the developers of the Community of Inquiry model (most notably Rourke, 1999) and informed by the subsequent work of Rourke and Anderson (2004), Schrire (2006), and Hughes, Ventura, and Dando (2007). The content analysis portion of this study was undertaken to directly address research question #4: Do learners represent their own social presence through interaction traces in online creative writing workshops?

Scope and preparation of transcripts

After the end of the semester, the researcher assembled transcripts of all Blackboard discussion board forums. The single threads in each forum were treated as discrete transcripts. Transcripts were culled to include only activity by student participants and the instructor over the course of the semester, and aliases were assigned to all participants in the transcripts. For the poetry course, this included 58 threads and 310 messages. The fiction course transcript set included 31 transcripts consisting of a total of 221 messages.

Messages and Coding Decisions by Course			
Course	Threads	Messages	Coding Decisions
Fiction	31	221	2873
Poetry	58	310	4030

Table 13. Messages and Coding Decisions by Course

Once the transcripts were anonymized and converted to plain text, the researcher loaded them into the Coding Analysis Toolkit (Qualitative Data Analysis Program, 2011), an online software application developed by the Qualitative Data Analysis Program and hosted by the University of Pittsburgh, that enables multiple coders and administrators access to transcripts for content analysis. This tool was chosen because it could be accessed from any Internet-connected computer, and would allow multiple coders the ability to conduct their analysis (which was projected to take twelve hours or more) on their own time, with their own computer systems, and in their own workspaces.

A coding template (Appendix G), adapted from the version of Rourke, et al.'s (1999) (figure 6) coding template developed by Hughes, Ventura, and Dando (2007) (Appendix D), was additionally loaded into the system for analysis of the transcripts. For the purposes of this project, an additional code, Technology, was added to the eleven pre-existing codes (grouped to represent the affective, cohesive, and interactive aspects of social presence under the Community of Inquiry framework), as well as a code to denote when none of the other codes were present. The Technology code was intended identify messages in which students made mention of the Blackboard Course Management System, expressed technical difficulties, or included links to other non-Blackboard websites within their messages.

Coder recruitment and training

The researcher posted fliers (Appendix L) on physical bulletin boards where graduate students with relevant backgrounds (those studying Information Studies, Education, Communication Studies, and Composition, Rhetoric, and Writing) would encounter them.

Two coders were recruited to conduct a content analysis. Both coders were current doctoral students in Composition and both had experience teaching undergraduates in writing classes. Neither had taught a course completely online, but both were familiar with the University's Blackboard Course Management System from both the perspective of the instructor and student. Coders were paid \$200 for their work, which occurred over the course of 10 days.

The researcher scheduled an in-person meeting with both coders to initiate the coding activities. During this three-hour session, the researcher and coders discussed the purpose of the project, reviewed and discussed the codes and the indicators of these codes they would likely encounter in the transcript, and worked with an enhanced print summary of the coding template (including examples and explanations).

The template, which appears on the CAT coding page above the message to be coded (figure 21), contained thirteen checkboxes, each representing the coding decision necessary for each item. Coders checked the corresponding box to indicate the presence of any or all of the eleven indicators of social presence (expressing agreement, asking questions, complimenting or expressing appreciation, expressions of emotion, embracing the group, expressing inclusivity, phatics, referring to others' messages, self-disclosure, using humor, and vocatives), to indicate the presence of discussion, complaints, or

questions about the course technology, or, if none of those were present, to mark the transcript as free of other codes. In essence, coders made thirteen decisions for every item they coded, indicating the presence or absence of each code in the corresponding checkbox at the top of each page. In the figure below, the individual codes are displayed based on the key used to indicate their presence, with shortened names to fit the available space.



Figure 21: A coding screen in the Coding Analysis Toolkit.

Once the scope of the project and the mechanics of the coding process were covered, the researcher and coders engaged in a “preliminary tryout” of the codes (as recommended by Rourke and Anderson, 2004), applying them to five transcripts from previous sections of the courses studied. During this training session, the coders were asked to think aloud as they simultaneously made coding decisions with the researcher on

the first transcript. For the second trial transcript, coders worked alone, but engaged the group in dialogue when they were unsure about particular messages or codes. After the coding of this transcript concluded, the researcher adjudicated the codes with the coders watching, and the group discussed which codes were valid according to the protocol and which codes were not.

For a third transcript, coders were asked to silently code, and again, at the conclusion of this trial, during the adjudication process, validity of codes was discussed. For the fourth and fifth transcripts, the researcher suggested that before advancing to the next message to be coded, that the coders read back over the codes as they are presented on the screen, and scan the message one last time before moving forward. In each of these trials, the agreement among the coders increased, and the coders themselves reported more comfort in applying codes to messages.

During these trials, Phatics, the code used to indicate language used for purely social reasons, was the most problematic for the coders. The description was expanded to include salutations, valedictions, signatures, and initial addresses on posts—usages that echo other modes of textual communication—which seemed make the purpose of the code more clear.

The CAT software allows coders to create memos for other coders and for those supervising coding to highlight particular passages of interest, to ask questions and refine the coding protocol, and to explain their decisions throughout the process. Coders were encouraged to use the memo feature to document their decisions, trends they identified, and to explain decisions or elaborate on struggles they encountered.

The Coding Process

Over the next nine days, the coders performed their analysis on their own time, and the researcher received notifications when a coder completed a transcript and checked in on them two to three times. Memos in the system were used to document the process to some extent, but both coders engaged via email, phone, and in person with the researcher during this period. The coders noticed shifts in their applications of codes throughout the process, and questions continued to arise throughout the coding. Some of the issues dealt with specific codes:

- One coder realized that he had previously applied the inclusivity code to any items in which collective pronouns were used, even when the antecedent of those pronouns were more a global *we/us* than a reference to the actual members of the courses.
- One coder identified textual problems in the transcripts in which characters which represented emoticons (and this indicated expressions of emotion or uses of humor) were improperly displayed. (“I’ve noticed a couple of places where a “J” lives by itself on the page. This almost always happens when a smiley emoticon is copy and pasted from Blackboard. I haven’t coded it as a smiley; however, I think I’m going to start”).
- One coder extended the definition of the Asking Questions code to include implied or rhetorical questions, as well as questions copied from other messages, because of their frequency, rather than keeping to the explicit questions outlined in the coding template.
- In many cases, expressions of group inclusivity were applied to messages which either contained the necessary pronouns or descriptions of the

group, but also when members of the group were talked about collectively (“I coded for inclusivity because the writer referred to ‘other peoples’” comments).

- Determining whether a particular phrase was “purely social” in nature, and thus appropriately coded as phatic, proved a problem for both coders (“I coded ‘Good Luck’ as a phatic here... not sure if that is a good idea...”).

The coding tool did not permit coders to return to or recode particular transcripts once they had submitted codes for a complete transcript (though they could move backward and forward through posts within a single transcript before submission). This presented problems in terms of the changes in understanding and shifting definitions of the codes each coder experienced (i.e., the coder who noticed the emoticon issue might have gone back to recode places where he noticed the errant letter J before). These shifts and realizations certainly had an impact on the agreement between coders. Additionally, one coder finished the analysis much more quickly than the other, and had access to the memos the previous coder attached to messages. All of these issues influenced agreement between the coders and the inter-rater reliability of the coding, which is discussed below.

Validating Individual Codes

In order to at least partially account for these shifts the researcher reviewed and adjudicated all codes applied to messages upon completion of the analysis by the coders. This process involved individual viewing of each code alongside the message to which it was applied. While these adjudications are not accounted for in the inter-rater reliability

calculations discussed below, they are taken into account in the calculation of social density for discussion thread transcripts that serves as an index for comparing each.

Validity decisions made by the researcher during this process were based on the original coding template and the discussions, memos, and messages that circulated among the researcher and coders during the coding process. Affirmative coding decisions were designated invalid in the following cases:

- The researcher marked as invalid messages coded as containing indicators of asking questions when those questions were quoted from other's messages, were indirect or rhetorical ("wasn't the speaker of the poem supposed to be taking care of Sharon?" Instructor in Poetry thread 47), or were merely expressions of interest ("I wonder if...").
- Additionally, it was clear that one coder was inclined to mark mild statements of affect ("I enjoyed this poem.") with expression of emotion, when the coding template reserved that code for explicit emotional reactions to a poem or story ("I found myself almost becoming ill - just imagining this scene" – Muriel in Poetry Thread 16).
- And finally, codes for inclusivity, complimenting/appreciating, and vocatives were marked as invalid when they were clearly applied to people who were not members of the course (poets or short story authors being discussed in a particular thread, for example).

Overall, the vast majority of affirmative coding decisions made by each coder were valid.

Codes applied and Validity by Coder				
Coder	Codes Applied (Fiction)	Codes Applied (Poetry)	Total Codes Applied	Percentage Valid
Coder 1	787	956	1743	93.85%
Coder 2	807	1080	1887	95.59%

Table 14. Codes applied and Validity by Coder

However, as the researcher was adjudicating these coding decisions, it was apparent that many other affirmative decisions could have been made. Particularly regarding the latent indicators—those which denoted embracing the group or self-disclosure, for example, which demanded coders make decisions about expressions of vulnerability—were often missed by both coders.

Additionally, the coders struggled with the sheer number of coding decisions they had to make based on each message. Codes which could have been or should have been identified in the same message (agreement indicates referring; signatures and salutations as phatics which may or may not also contain vocatives) often had only one of the appropriate codes applied. Coders, while usually applying sufficient codes to a message often did not exhaustively code it. This may be an effect of the relatively large size of each message (up to 1,904 words within the fiction course transcripts).

The distribution of valid codes for each course is summarized in the table below. (The per-course totals should not be used for direct comparisons between the courses, because, as illustrated in Table 13, they reflect codes applied to different numbers of threads and messages.)

Valid Code Distributions by Course						
Code	Poetry	% of total Poetry codes	Fiction	% of total Fiction codes	Total	% of total valid code applications
Agreement	66	3.44%	42	2.62%	108	2.97%
Asking Questions	114	5.94%	162	10.12%	276	7.58%
Complimenting/ Appreciating	428	22.29%	235	14.68%	663	18.22%
Embracing the group	70	3.65%	37	2.31%	107	2.94%
Expression of Emotion	321	16.72%	179	11.12%	500	13.74%
Expression of Group Inclusivity	72	3.75%	49	3.06%	121	3.33%
Phatics, Salutations	163	8.49%	184	11.49%	347	9.54%
Referring to other's messages	118	6.15%	85	5.31%	203	8.82%
Self-disclosure	151	7.86%	157	9.81%	308	8.56%
Technology	41	2.14%	27	1.69%	68	1.87%
Use of humor	81	4.22%	142	8.87%	223	6.13%
Vocatives	229	11.93%	213	13.30%	442	12.15%
No codes	66	3.44%	89	5.56%	155	4.26%
Total	1920		1601		3521	

Table 15. Valid Code Distributions by Course

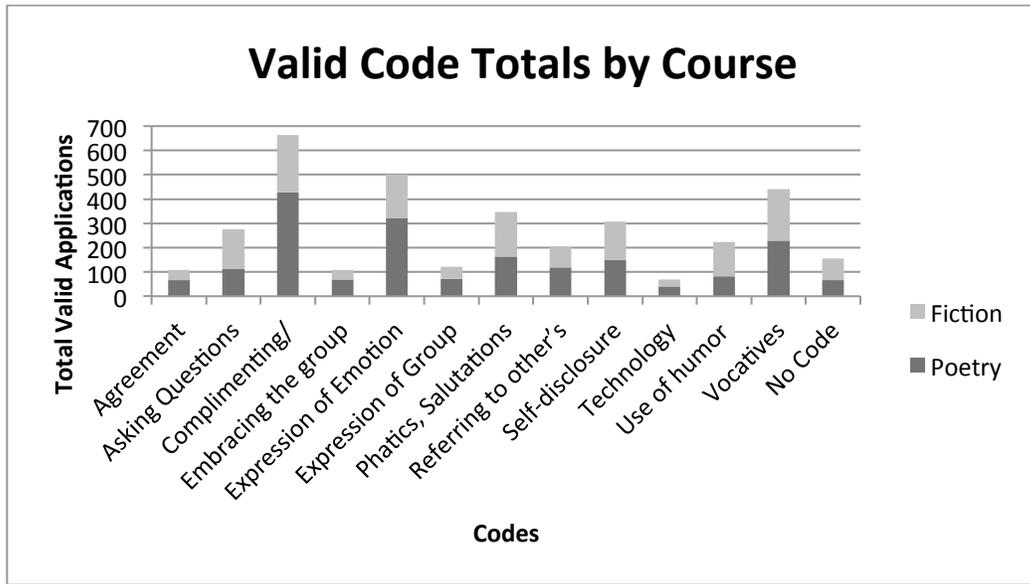


Figure 22. Graph of Valid Code Totals indicating Course Differences

While the high percentages of valid codes applied by each coder could be interpreted as evidence that they were successful in consistently identifying indicators of the various codes in keeping with the protocol, the inter-rater reliability figures discussed below illustrate that both coders missed instances where valid codes could have been applied. In many cases only one coder applied the appropriate code.

Despite the use of Hughes, Ventura, and Dando's (2007) adaptations to the original social presence coding template, the complexity of the template and subtle differences among the codes seems to have, as Fahy (2001) warned, negatively affected the coders' ability to make every appropriate decision. For units of analysis as large as those in this study, it may be more appropriate in the future to use the major groups of indicators (affective, cohesive, and interactive) to reduce the burden of so many decisions on coders. A reduction in false negative coding decisions would be a likely result of reducing this burden.

Inter-rater Reliability

Upon completion of the coding, data representing all decisions made by the coders was imported into SPSS for calculations of inter-rater reliability. It is important to note here that the data processed for inter-rater reliability were the raw coding decisions each coder made. The adjudication process had no impact on these calculations.

The first statistic chosen to measure inter-rater reliability was Cohen's Kappa, which is appropriate for two coders and a set (and equal) number of coding decisions among them. A weighted kappa was not used because the categories are not ordered. Overall, inter-rater reliability for the coders was found to be Kappa=0.680 ($p < 0.001$), 95% CI (0.660, 0.700).

Overall Inter-rater Reliability Statistic for All Coding Decisions			
Complete Dataset	Cohen's Kappa	Significance	95% Confidence Interval
All Coding Decisions	0.680	$p < 0.001$	(0.660, 0.700)

Table 16. Overall Kappa Statistic for All Coding Decisions

Based on the benchmarks set out by Landis and Koch (1977) (table 1), this Kappa value is well within the range of substantial agreement. This number is, however, a bit lower than Kappa statistics (when provided) in similar studies reported earlier in the literature review. In many of those cases, coding decisions were discussed, and even adjudicated in some cases, by the coders themselves. With only one pass at the content analysis, and without the ability to make all coding decisions simultaneously, the coders in this study did not have those opportunities. It is likely that the overall Kappa would have been higher were individual coding decisions negotiated together. However, in this study, the coders' isolation restricted their influence on one another. Still, as Riffe, Lacy,

and Fico (1998) recommended, .80 to .90 is the preferred range for Cohen's Kappa. Some allowances may be made due to the fact that previous applications of the coding template were in the context of more structured, less personal communication, where, for example, truly affective statements may be less difficult to pick out. Previous studies make mention of material from textbooks (Shea, et al. 2010) and other instructional materials being brought into the discussion. In both the poetry and fiction courses, more emphasis is on personal, and often emotional, responses and strongly affective language was frequently present in both the creative work and peer responses to it.

In addition to the overall Kappa statistic, several other calculations were made in order to illustrate the degree to which the coders agreed on the codes applied and not applied to messages overall, to the individual courses, and to the workshop portions of each course. Additionally, Cohen's Kappa was calculated for each of the codes and for the three groups of codes that comprise the social presence instrument. Those calculations are summarized in the tables below.

Cohen's Kappa (Overall, by code group)			
Dataset: Code Group	Cohen's Kappa	Significance	95% Confidence Interval
Affective Expression of emotion, Use of humor, self-disclosure	0.495	p<0.001	(0.450, 0.540)
Cohesive Embracing the group, Expressions of group inclusivity, Phatics, salutation, Vocatives	0.701	p<0.001	(0.666, 0.736)
Interactive Expressing agreement, Asking questions, Complimenting, expressing appreciation, Referring to others' messages	0.755	p<0.001	(0.726, 0.784)

Table 17. Cohen's Kappa (Overall, by code group)

The code group comparison reveals that affective codes experienced the most disagreement among the coders. This is not surprising, as these codes tend to be of the more latent variety and have traditionally been difficult to identify consistently in other studies. Additionally, the more liberal application of the Expression of Emotion code by one coder led to the lowest score of all (0.294) for that particular code (Table 18). Both the Cohesive and Interactive code groups fall within the substantial agreement range, thanks likely to the numerous manifest indicators that represent the codes within their groups. Vocatives, for example, which involve the use of other course participants' names, is the code with the highest Kappa value, in the almost perfect range at 0.925.

Despite containing Asking Questions (which was problematic in the current study), the Interactive code group received the highest groupwise Kappa statistic at 0.755. This may be due to the high concentration of complimenting/appreciating applications (which was validly applied considerably more often than any other code [see table 5]) and additionally had one of the larger Kappas on its own (0.708). Code-by-code Kappa statistics are summarized in Table 9 below. Interestingly, Use of Humor, which has not achieved high levels of agreement in previous studies (Rourke et al., 1999, for example only managed a Kappa of 0.25 [with the more liberal Holsti's coefficient] for humor in their study) received a rating within the range of substantial agreement.

Cohen's Kappa (Overall, by individual code)			
Dataset: Individual Code	Cohen's Kappa	Significance	95% Confidence Interval
Expression of Agreement	0.659	p<0.001	(0.549, 0.769)
Asking questions	0.689	p<0.001	(0.622, 0.756)
Complimenting, expressing appreciation	0.708	p<0.001	(0.647, 0.769)
Embracing the group	0.567	p<0.001	(0.449, 0.685)
Use of humor	0.694	p<0.001	(0.618, 0.770)
Expression of emotion	0.296	p<0.001	(0.237, 0.355)
Expression of group inclusivity	0.550	p<0.001	(0.442, 0.658)
Phatics, salutation	0.514	p<0.001	(0.445, 0.583)
Referring to others' messages	0.701	p<0.001	(0.625, 0.777)
Self-disclosure	0.553	p<0.001	(0.475, 0.771)
Technology	0.634	p<0.001	(0.497, 0.771)
Vocatives	0.925	p<0.001	(0.892, 0.958)
No Code	0.873	p<0.001	(0.816, 0.930)

Table 18. Cohen's Kappa (Overall, by individual code)

There was a slightly higher Kappa statistic for codes applied to transcripts from the poetry course overall than the fiction course. Several factors could account for this.

First, the poetry course contained four times as many workshop threads, and those threads were often the locations of some of the most reliably identified codes (Complimenting/Appreciating and Vocatives). Furthermore, the messages and threads in the poetry course tended to be less lengthy, which may have provided coders with a less demanding task when making each coding decision.

Cohen's Kappa (by course)			
Dataset: Course	Cohen's Kappa	Significance	95% Confidence Interval
Fiction	0.673	p<0.001	(0.644, 0.702)
Poetry	0.685	p<0.001	(0.660, 0.710)

Table 19. Cohen's Kappa (by course)

Within each course, Kappa statistics for each type of forum varied quite a bit. The workshop and exercises threads in the poetry course demonstrate those that were the most reliably coded, while the Kappa statistics for the exercises and revisions threads in the fiction course reflect more consistent coding, with the workshop threads ranking fourth. The length, number, and variety of messages posted to these forums varied considerably between courses, which may have affected coders' ability to consistently apply codes across courses.

Cohen's Kappa (by forum, within course)			
Dataset: Forum	Cohen's Kappa	Significance	95% Confidence Interval
Fiction			
Workshops	0.636	p<0.001	(0.583, 0.689)
Discussions/ Lectures	0.323	p<0.001	(0.215, 0.431)
Exercises	0.754	p<0.001	(0.705, 0.803)
Advanced Lectures By Advanced Students	0.654	p<0.001	(0.482, 0.826)
Final Revised Stories	0.739	p<0.001	(0.617, 0.861)
Questions, Miscellaneous Observations, Love Letters	0.654	p<0.001	(.482, .826)
Poetry			
Workshop of Poems	0.725	p<0.001	(0.696, 0.754)
Discussions/ Lectures	0.497	p<0.001	(0.413, 0.581)
Bio Exercise	0.767	p<0.001	(0.669, 0.865)
Miscellaneous Musings and Thoughts	0.604	p<0.001	(0.496, 0.712)
Final Revised Poems: Portfolio	0.625	p<0.001	(0.464, 0.786)
Lectures by Advanced Students	0.350	p<0.001	(0.066, 0.634)

Table 20. Cohen's Kappa (by forum type, within course)

Percent Agreement

Researchers often report multiple statistics to demonstrate inter-rater reliability (Rourke et al., 1999; Shea, et al., 2010). To balance with the more conservative, chance-corrected kappa, percentage agreement was also calculated in this study, using ReCal2 (Freelon, 2011). Riffe, Lacy, and Fico (1998) recommend 80% agreement as an acceptable level among coders. Most coding categories in the current research experienced percent agreement at or well above that benchmark. Those results are summarized in the tables below:

Dataset: Overall	Percent Agreement
All Coding Decisions	87.6%
All Workshop Coding Decisions	88.1%

Table 21: Overall Percent Agreement Between Coders

As with the Cohen's Kappa statistic, the strongest agreement numbers come from the Interactive category (89.4%) and the weakest (77%) from the codes in the Affective category. As a group, Cohesive codes were applied only slightly less consistently (89.1%) than Interactive codes.

Dataset: Code Groups	Percent Agreement
All Affective	77.0%
All Cohesive	89.1%
All Interactive	89.4%

Table 22: Percent Agreement Between Coders by Code Group

For individual codes, Vocatives received the highest percent agreement, and phatic and emotion received the two lowest scores for agreement.

Dataset: Codes	Percent Agreement
All Agreement	93.9%
All Asking	86.9%
All Complimenting	86.6%
All Embracing	92.0%
All Humor	90.0%
All Emotion	60.6%
All Inclusivity	90.2%
All no code	96.6%
All Phatics	77.7%
All Refer	90.3%
All Self-disclosure	81.6%
All Technology	95.6%
All Vocatives	96.4%

Table 23: Percent Agreement Between Coders by Code

Within each course's forums, threads in the exercises and workshop portions of each course received higher levels of coding agreement among coders. This may be due to the fact that these forums tended to have higher numbers of both threads and messages, reducing the impact a few incongruent coding decisions would make.

Dataset: Forum	Percent Agreement
Fiction (overall)	86.5%
Workshop	82.6%
Discussions/ Lectures	81.8%
Exercises	91.4%
Advanced Lectures by Advanced Students	85.7%
Final Revised Stories	91.2%
Poetry (overall)	87.9%
Workshop of Poems	88.1%
Discussions/ Lectures	82.9%
Bio Exercise	89.6%
Miscellaneous Thoughts and Musings	81.4%
Final Revised Poems: Portfolio	85.5%
Lectures by Advanced Students	69.2%

Table 24: Percent Agreement Between Coders by Course and Forum

Social Density in the Discussion Board

Following on the early Community of Inquiry social presence work by Rourke, et al. (1999), social density scores were calculated based on the coding data in order to allow for comparisons of indicators of social presence between courses and among the various threads and forums.

The method employed by Rourke et al. (1999) involved dividing the total number of indicators of social presence by the number of words in the transcript. In order to suit the current research, alterations to this scheme were made.

Rather than calculating social density for a thread through division by transcript word counts, the total number of social presence indicators was divided by the number of messages in each thread. This adjusts the social density calculations for the defined unit of analysis in the study (the message) rather than the coder-determined unit in the Rourke et al. (1999) study. In addition to more accurately reflecting the unit of analysis in the current study, the basing social density calculations on message counts rather than word counts allows for comparison between threads and forums in the fiction and poetry workshops, in which students had different formal requirements for posting in some forums and behaved differently on their own.

Furthermore, the figures used to represent the total number of social presence indicators was arrived at through summing the codes applied by each coder that were deemed valid in the adjudication process and subtracting the number of code matches. This ensured that 1) codes which were mistakenly or errantly applied in conflict with the coding template were not counted as social presence indicators, and 2) that coding decisions in which both coders agreed were not counted twice.

To clarify, social density was calculated using the following formula:

$$\text{Social Density} = \frac{\text{Total valid codes applied} - \text{Total code matches}}{\text{Total number of messages in set}}$$

Below are the results of the social density calculations.

Overall Social Density Score by Course			
Course	Adjusted Valid Codes	Total Posts	Social Density Score
Fiction	998	221	4.52
Poetry	1189	309	3.85

Table 25. Overall Social Density Score by Course

In the fiction course, an overall social density score of 4.52 implies that the typical message contained considerably more evidence of social presence than messages in the poetry course (social density score=3.85).

Social Density Scores by Forum				
Forum		Adjusted Valid Codes	Total Posts	Social Density Score
Fiction				
	Workshops	440	68	6.47
	Discussions/ Lectures	166	38	4.37
	Exercises	434	99	4.38
	Advanced Lectures by Advanced Students	34	7	4.86
	Questions, Miscellaneous Observations, Love Notes	12	2	6.00
	Final Revised Stories	15	7	2.14
Poetry				
	Workshop of Poems	792	214	3.70
	Discussions/ Lectures	213	51	4.18
	Bio Exercise	79	14	5.64
	Miscellaneous Musings and Thoughts	109	17	6.41
	Final Revised Poems: Portfolio	19	9	2.11
	Lectures by Advanced Students	11	4	2.75

Table 26. Social Density Scores by Forum

Furthermore, when comparing the individual forum types within the courses, the Fiction Workshop (6.47) and the Poetry Miscellaneous (6.41) forums rank highest. In both cases, the threads containing students' revised creative writing portfolios contained

the fewest indicators of social presence. Thread-by-thread social density scores for both courses can be found in Appendix M.

Because multiple forums were open simultaneously and were used by participants during different phases of the semester, weekly social densities were calculated to show fluctuations in social presence throughout the semester. Weekly social density scores were calculated by taking the mean of the individual social density scores from threads open for a given week. Weekly social density scores ranged from a low of 2.61 (Fiction, weeks 13 & 14) to 5.90 (Fiction, weeks 7 & 9).

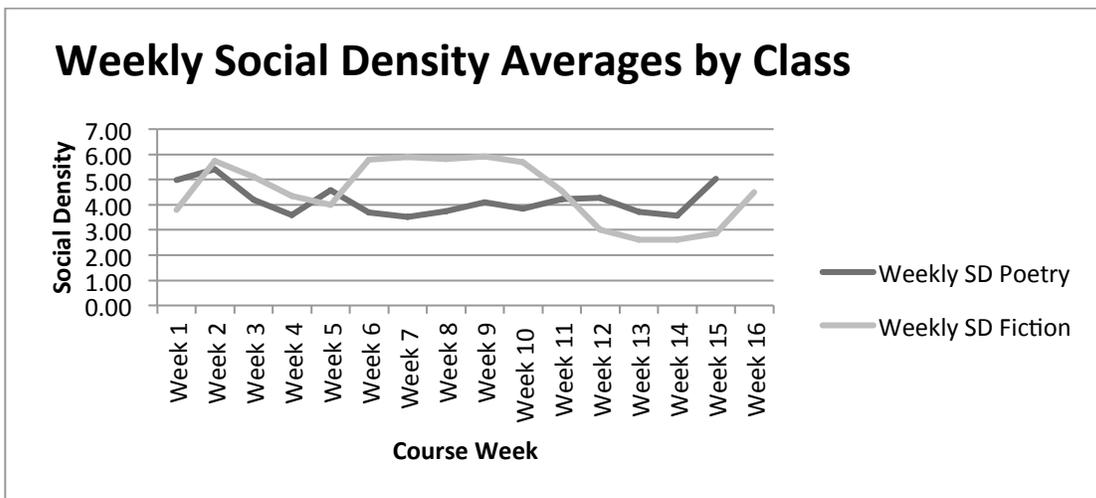


Figure 23: Weekly Social Density Averages by Course

The trend lines are illustrative of the different sequences in each course. In the fiction course, the bulk of the exercises and workshop threads in which participants posted were complete before Week eleven, and few new threads were initiated after that point, until students posted their revisions in the final week. In the poetry course,

participants were still engaged in the final of the 28 workshop threads up until Week fourteen.

Chapter 5: Case Reports & Cross-Case Analysis

This chapter explores in detail the activity of participants and the instructor in both the fiction course and the poetry course. In addition to the text of participant and instructor discussion board postings, information from the incoming, end-of-semester, and workshop surveys, the instructor's weekly emails to each class, usage information from the course management system, and interviews with four students and the instructor contributed to the construction of these case reports. Additionally, reference is made to the content analysis and survey analysis performed in Chapter Three. The two courses are treated as separate cases. Similarities, differences, and themes emerging from each course are compared in a cross-case analysis section at the end of the chapter.

Participant names have been changed, excerpts of their creative work have been excluded (except where briefly quoted by other participants), and all identifying information has been removed. Sources of evidence for the case reports and the cross case analysis are summarized in figure 24 below.

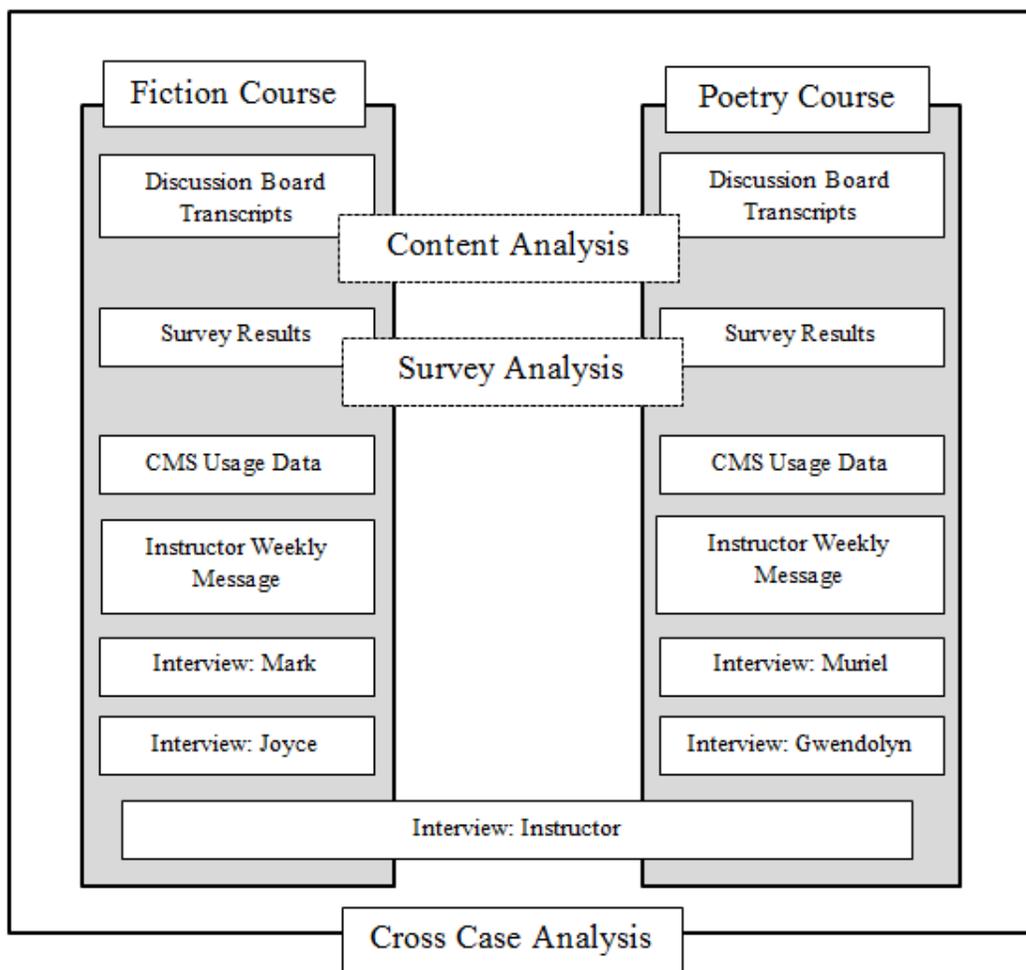


Figure 24. Sources of Evidence for the Case Reports and Cross Case Analysis.

CASE REPORT: POETRY COURSE

Of the 16 students enrolled in the Fall 2010 section of Poetry Workshop 215/401, eight students consented to participate in this research study. Among them, five were in the 18-to-25 age range, one was in the 26-to-35 age range, and two were in the 56-to-65 age range. For all but one, the poetry course was their first (5) or second (2) online course, and one participant had taken five or more online courses.

The instructor of the course has taught an online section of this course each semester for the past five years. The primary work product for students in the course is a portfolio of several poems, but students are also expected to provide critiques of their peers' poetry and to respond to discussion questions.

Preparing the Online Course Environment

Prior to the beginning of the course, the instructor entered the course management environment and uploaded the syllabus, workshop guidelines, and other course documents. Additionally, she created the forums within which work for the semester was to take place.

The titles of these forums denote their intended use, but also introduced students to the instructor's friendly and playful voice, which was sustained through her emails to the class and her responses to their creative work.

Forum	Instructor's Description
Workshop of Poems	Here's where you post your poems for workshop & you comment on those poems. You need to comment on ALL the poems except for your own. Really. Not joking. Thanks!
Bio Exercise	Please post your poem as a response to this post. If you have a picture, please post it as well. Thanks!
Discussion/Lectures	I'll post things here about the various poets we're going to look at. Please post your responses as a response to my post. Thanks!
Lectures by Advanced Students	Write an analysis of one poem, giving us an idea some of the techniques, quirks and predilections of the poet. 2-3 pages. Please post here.
Miscellaneous Musings and Thoughts	Here's where you put your thoughts, questions and unnatural feelings.
Final Revised Poems: Portfolio	Post four revised poems here please--in one file, along with the originals by December 10. Then go out and celebrate by eating chocolate and sleeping in.

Table 27. Poetry Course Forums & Descriptions

Upon accessing the course homepage in the course management system for the first time, students were greeted with a welcome message from the instructor containing information about the structure and scope of the course.

If you want accounting or trigonometry I suggest you check your numbers and re-register, there will be no formulas here. I've posted the syllabus under Course Information, and have posted the first week's assignment under (surprise!) the Assignment tab. Poke around Blackboard and get familiar with its quirks and annoyances. Don't worry, you can't break it. I think. (Instructor, Opening Class Announcement, week one)

This early message served as a preview of the instructor’s exploratory plan for the course, and served to set it apart as something very different from the other courses students may have taken. Mentioning the “quirks and annoyances” of the course management system prepared students for the frustrations they might encounter, and this approach to system criticism carried through in further messages from the instructor and many students.

The Initial Week: Introductions & Readings

During the first week of the semester, the instructor opened the Bio Exercise forum, leading with a poem of her own, some information about her life and experiences, and personal photo. Throughout the week members posted their own similar poems and introductions, sharing, at times, their expectations of the course.

The other discussion threads in active this week were initial lectures in the Discussion/Lectures Forum—one on Meter and Rhythm and one on Image—to which most students did not respond. Adrienne, a part-time student who has a Master’s degree from a professional program and two grown children, posted a humorous poem in response to the Meter & Rhythm lecture, but all other student activity during the week was in the Bio Exercise forum.

The Workshop Weeks

The regular weekly “workshopping” of poems began in week three of the course, with half of the students sharing the poem they had written imitating the style of Elizabeth Bishop. The other half of the class shared their Bishop-inspired poems the following week. Students in both groups were required to post comments on every poem

(but their own) each week. This process continued every two weeks, with a new poet as inspiration with each subsequent assignment (Philip Larkin, Robert Hayden, and Seamus Heaney).

Apart from the five threads in the Discussion/Lecture forum, the Workshop of Poems forum threads were the location of all of the major activity among students. It was within these threads that the students interacted with one another, read each other's poetry and criticism, and formed impressions of their classmates. In general, the critique was very supportive ("complimenting and appreciating" was the most common indicator of social presence in the poetry transcripts by a factor of almost two), and participants often included specific personal details in their critiques. Grammatical problems, spelling errors, and potential edits were highlighted by participants, but these criticisms were generally couched in self-disclosure, humor, or other indicators of social presence:

The only thing I was a little bit confused about, were the places you chose to break up the paragraphs. I think that maybe there is a better place to switch thoughts. (Denise, Poetry Thread 29, week seven)

In the last line you capitalized "Happy", maybe to add emphasis to the idea. I suggest just italicizing it though, because seeing it capitalized reminded me with one of the seven dwarfs, but then again I'm a big Snow White fan. (Emily, Poetry Thread 17, week three)

Peer critics gave poets the benefit of the doubt that the poets themselves knew what was best for their poems:

I feel like the double question marks and multiple exclamation points are your way of showing us how important it is rather than letting the words do it. (Anne, Poetry Thread 40, week ten)

In the her interview, the instructor discussed her belief that this mode of criticism comes from the fact that the students in this course are just getting used to talking about poems, and they tend to respond with their feelings. Additionally, she feels students in

these classes tend to assume that the speakers of the poems are the poets themselves, and are reluctant to criticize a poet's feelings or observations.

Gwendolyn, a 26-to-35 year old woman in her first online course, indicated that she hoped her peers would take something more than criticism from her responses to their poems:

I tried to give feedback and say many good things. That I'm really nice. I had a hard time criticizing. Their stuff was really good, and with a poem, you can write anything. No one knows if you spent three weeks or three minutes on it. You could tell that we wanted to find the good in everything. The teacher did, too. (Gwendolyn, Interview)

At the end of the semester, every student in the course indicated agreement or strong agreement with the statement "I felt that my writing was critiqued fairly." In interviews, both Gwendolyn and Muriel, a frequent online student, provided some perspectives on how students in the class approached their poetry:

I think the syllabus was really clear about the direction we were supposed to take, to treat everyone's postings with respect and clarity. I can count on my fingers the number of times there was a question or something that may have been disrespectful or something that I might have misinterpreted... Some people didn't post, but I didn't get the sense that people were just filling space. More likely, they just didn't post a response (Muriel, Interview).

You could tell sometimes when someone was bluffing you, and had just read other people's posts... Sometimes people would know so much about your poems you could tell the spent some time with them (Gwendolyn, Interview).

Processes of Reading and Writing

Posting frequency, times and dates of posts, survey responses, and interviews all indicate that the reading and writing among participants varied widely. In the end-of-semester survey, less than half of the students agreed with the statement "I read others'

postings before I read my own.” Students were less focused on others’ opinions of the work, and focused on supplying their own personal critique.

On classmates’ work, I would read their poem, and immediately write my response [in the discussion board] then I would read everyone else’s response. After that, if I found that they would bring up other things, I would post again.” (Muriel, Interview)

I read *everything*. Sometimes, when I read someone’s poem, I’d go back and read their [earlier] posts. (Gwendolyn, Interview)

Participants expressed little anxiety in regard to sharing their work. After reading the biographical poems posted in advance of hers, Adrienne indicated that she was more nervous about commenting on their work than she was posting her own:

I love what I've read and am scared to comment on others’ poetry but I am comfortable having my work commented on (Poetry Thread 2, week one).

This fear of commenting may have been rooted in perceived differences in skill level that Adrienne took from the Bio Exercise, but participants in the class were quite interested in the responses of all of their peers. Gwendolyn revealed that she was more interested in comments that accumulated on her own poems, and paid closest attention to those.

I was really excited and anxious when people were posting comments on my poems. I really enjoyed the feedback. I checked probably twice a day, not every other day like the other threads. I also went back for revisions. Did I go too far or did I not go too far? I couldn’t wait to see what they said. (Gwendolyn, Interview)

On my first post it had like 15 views and only 4 comments, and I was like, c’mon people, why are you reading this and not writing anything? I was so anxious to know what they thought. (Gwendolyn, Interview)

Gwendolyn and Muriel both felt like the anxiety they would have experienced had this been a face-to-face class would have been more difficult to deal with:

I think it would have been harder. In Blackboard, your faceless, you’re just words. I’ve never [read my poems] face to face, but you’re gonna question what you say,

worry about being judged or not having public speaking skills. I liked it like this. It was my first time sharing, and it was gradual (Gwendolyn, Interview).

In an online class you have more time to think about it. You're relaxed in your own home and you can use your emotional intelligence. In the [class]room, it's too hot or too cold, or someone's eating or drinking or something, and it's difficult to concentrate-these things inhibit emotional intelligence. [Online], you can focus more, and if you want to make a point, you don't have to wait your turn or talk over anyone" (Muriel, Interview)

Participants were more comfortable with the amount of time they were given to compose their ideas, and appreciated not having to compete for time, and they appeared not to be worried that, unlike what would happen in a face-to-face course, their criticisms would persist for others to read for the duration of the semester. The participants who were interviewed appreciated the ability to share their work and compose their criticisms on their own time and without the pressure of performing or speaking with the entire group as an audience.

Non-Compulsory Posting

Though few participants engaged in posting messages on the discussion board that were not required for course credit, two participants in particular posted more messages than were required.

Adrienne and Muriel, the two participants in the 56-to-65 age range, posted 69 and 70 messages, respectively, over the course of the semester. This was well above the average of 41.38 for participants in the poetry course. Another notable similarity between Adrienne and Muriel was their tendency to post often in reply to comments or poems that struck a personal chord with them, even when it was not likely other students would reciprocate.

Sylvia, I agree with you that sometimes poets can be confusing. I often read poetry as a means to relax. If confusing and complicated, I begin to skim instead of absorb. I really enjoyed reading your posting. (Muriel, Poetry Thread 12, week 3)

Others in the class generally did not post messages that were not required, but in the end-of-semester survey, all but two participants indicated agreement or strong agreement with the statement “I posted more than was required.” Participants may have been thinking of the word count requirements on the peer critiques in this response, but even in that case no single student posted enough to meet the requirement for responses to every poem. Muriel, for example, posted shorter messages than were required for fourteen of the poems. Despite her awareness of the quota, she felt the brevity of her messages would be appreciated by her peers:

To tell the truth, I tried to be very concise, not to get too wordy. I wanted to get out the valuable information, the constructive criticism. I tried not to ramble. I hope my posts were appropriate in length, but I wanted the meat of them to be taken seriously and for them to be constructive. I think the majority of the class felt this way, but there were a couple of ramblers. (Muriel, Interview)

As someone who read and responded widely, Muriel was aware of the large number of messages that were created each week, and did her best not to waste anyone’s time with discussion that would not be useful to them.

Conflict and Resolution in Public

Direct responses and explicit references among participant messages were rare later in threads (i.e., after the poem leading any particular workshop thread had been critiqued). However, in one thread during week ten, a few students returned to a thread, watched closely, and responded multiple times. Adrienne opened Poetry Thread 39 with a poem reflecting the style and subject matter of poet Robert Hayden. Over the next several days, a discussion developed in the thread after Marianne, an 18-to-25 year old woman in

her first online course, was offended by one of the words Adrienne used. That ensuing conversation, edits to the poem, and additional interactions among participants are detailed below.

Though the uncustomary level of interactivity and non-compulsory posting emerged during week ten in the context of thread 39, the incident itself had its roots in the Discussion/Lecture thread (#23) during week nine, when the Robert Hayden poem assignment was announced and discussed. In answering the discussion questions about Hayden, and considering her poem, Marianne mentioned anxiety she felt:

For my next poem, I will incorporate African American church songs in my poem and talk about experiences that I been through that deals with oppression/racism. I am afraid of offending people. I hope that my poem don't offend anyone in this class. However someone once told me when it comes to this topic, if people are uncomfortable then they are learning. (Marianne, Poetry Thread 23, week nine)

In a rare direct response to a student in the Discussion/Lecture forum, the instructor replied publicly with the following, just a few hours after Marianne's initial comment:

Don't worry about offending people, I agree what that what makes us uncomfortable is instructive and interesting. (Instructor, Poetry Thread 23, week nine)

At the end of that week, when students began posting the poems to be critiqued in during week ten, Adrienne launched thread 39 with her Hayden-inspired poem. Anne, an acting major in her first online class, was first to respond, and quite positively, to the power and tone of Adrienne's piece. Muriel followed with praise the following day ("Your poem is so intense, powerful and blatant!"). Marianne's critique came next, about 24 hours after the poem was originally posted. It includes some of the familiar and supportive feedback that had become customary among this group of poets, but it also

included a specific suggestion, rooted in her personal feelings, regarding how the poem should be edited:

Okay so I really love how you took Hayden style of poetry and created a great poem. I love how you section off different parts of the poem however everything still came together. I love the ending of your poem because I feel there is some truth to it. Now the only thing I would want you to change is the use of the N-Word. I feel no one should use that word period because it was and still is, always will be a racist and derogatory word. It is offensive to me so I would greatly appreciate it if you change that word from your poem. I feel you can use other word to help describe your poem. (Marianne, Poetry Thread 39, week ten)

Adrienne must have been monitoring the thread closely, because within three hours, she had already posted a response and made edits to the poem, replacing the term to which Marianne had taken offense, and sharing some very personal details about her life and the anxiety she had felt before sharing the poem.

Dear Marianne...I am going to change it right now. I felt so strongly to change it but then I kept thinking that if I was bringing it up to date that I should perhaps keep it in because of the way Hayden's poetry created controversy and also because I spoke to my children about it - and they are black - and they felt it was important to make the reality of how horrible the situation is out to the open, but even after I printed it, I felt scared and I felt very uncomfortable and worried, like I was very wrong for doing it... but at the same time, I felt that I should try to be open and face the controversy, and try to keep the truth of the horrible words they used. I am very thankful for your input and for helping me to at last come to a final decision, because for me, no matter how much I want to share the truth, I am even more concerned to share compassion and understanding. Thank you again. (Adrienne, Poetry Thread 39, week ten)

Following that exchange, the two continued to engage on the topic, both within the thread, and elsewhere.

Thank you for responding back to my comment. I will say I must agree with you about bring up race issues. It is a very touchy subject and I believe when it comes to race issues, the only way for people to learn is to be/feel uncomfortable. I know that you wanted everyone to educate about race/racism through your poetry and I really respect you for doing that. Most people I know would use that word as way

to educate but for me personally it is hard... (Marianne, Poetry Thread 39, week ten)

Hi Again Marianne, Wow - thank you so much for replying back to me - and also to the class - about this issue. It means so very much to me to know that you understand even though it's so very difficult and grievous, I'm sure. (also - I want to put this on the other page, but no one seems to be checking it much - so I hope this is OK here for just this one time) - If you (and the class) don't mind me sharing, I went through many long years of serious abuse as a child and also later as an adult, and to be honest, that was the first thing that opened my eyes and brought me closer to the civil rights issues and later, closer to my wonderful children, and the pain that I felt just a little bit connected with. Every time I felt a belt or a broom or a kick in the gut, it was like an angel from a slave experience or other horrible American atrocity was watching over me and somehow allowing me to survive and eventually escape. And to be white is sometimes to be ashamed of our insane ancestors and so broken...it does all take time to heal. When the 4 girls were taken from their families in Birmingham and so much was happening then - I was often in deep grief and white classmates just didn't get it. I am so very honored and very appreciative of the fact that you had the courage to say something to me and to keep things open. wow, I'm very proud to know you and if you don't mind, I would love to share some of this with my children. thank you again for your deep caring and concern about these issues and for your openness and courage. I am so glad also that you were in our class so that I could learn and grow from this and to know what to put into a poem. I think you helped the entire class. Thank you again, Adrienne (Adrienne, Poetry Thread 39, week ten)

In her message Adrienne continues to share very personal details from her life, explaining and providing context for her identification with the poem's subject matter. She also mentions having wanted to post this message where others would have been likely to read it (she was probably referring to the Miscellaneous Thoughts and Musings forum), but felt other students were not reading the messages posted there. After this exchange, the others in the class continued to submit their comments, indicating positive reactions to the poem and support for the strong language—though every participant who posted after the evening of November 1, the initial day in that week's posting schedule, saw only the edited version of the poem. Gwendolyn, for example, mentioned dealing

with controversial issues in her own writing and expressed an appreciation for Adrienne's strong language:

When I wrote my poem that spoke of abortion, welfare, religion and the society we live in etc... I was uncomfortable with making strong statements in fear of offending. It's uncomfortable sometimes in writing when we push our own boundaries. You shed light on the circumstances just as Hayden did for me. I am white and will never know the true reality of racial hate crimes. But you did as Hayden did for me which was let me into a piece of the emotions and I think that's how we grow and change... (Gwendolyn, Poetry Thread 39, week ten).

Though others responded to the strong language, no other student participant's discussion of Adrienne's poem referred directly to the offending term, and it is not clear whether any of these participants explored other messages in the thread were aware of the conflict. Adrienne continued to monitor the thread and returned again toward the end of the week to share a link to historical accounts of the Sixteenth Street Baptist Church Bombing in Birmingham, Alabama in 1963, which had been the inspiration for her poem.

A few days later, the instructor posted her response to the poem several days later, addressing the situation directly.

And of course, because I am the teacher and have to do this, I have some things to think about when revising. First off, the "N" word. I didn't read this when you had it in there--and I certainly understand Marianne's objections to it. It's a really offensive word--probably the most offensive word we have in the English language. So while I do think you have the right to use it if you deem it necessary (that is to shock and propel discussion) you also have to be wary of its power to hijack the poem and then the poem becomes all about the "N" word and the discussion is about that rather than racism. So it has its pluses (historical accuracy, a tell of a certain character) and its minuses (too much power, offensive to many people). But it is totally your call, I just want you to make a decision about it that feels right to you. (Instructor, Poetry Thread 39, week eleven)

Discussion board activity related to this poem and the interaction among participants it generated was not limited to the thread in which it was posted. In the thread where Marianne's Hayden-inspired poem was being simultaneously critiqued by

the class, Adrienne posted the following, as the first among participants to respond to the poem:

Hi Marianne. I love this message. You truly have a great deal to say and you say it with an enormous amount of passion here. I love feel very strongly about these issues, so it is wonderful to see that they mean so very much to you and that you are willing to ask us to really look at ourselves in the mirror. It is beyond important to address racism and to see if it is in front of us and around us and to do something about it, even when it sometimes stirs up emotion in us, I am glad you can be brave enough to share some of these emotions. Because of the way you brought out such deep seated issues and because of the way you showed ironic and drastic contrasting points of view within the poem, switching back and forth to the beauty of your musical verses to the stark and honest questions of the reality of racism, you were able to imitate Hayden very well in this poem. I thank you for sharing your soul with us (and I hope you read my note of apology) and for making things clear about this issue. (Adrienne, Poetry Thread 40, week ten).

In interviews after the class concluded, both the instructor and Gwendolyn discussed the incident. Gwendolyn wondered whether the thoughtful discussion that followed Marianne's indication that she was offended would have occurred in a classroom context:

There was one writer who used the n-word, and one girl was offended, she thought it shouldn't be used even in art. I don't know how that would have played out face-to-face. No one was thinking about what they'd say while someone else was talking. I think [Adrienne's poem] would have been taken the wrong way in person. People just got to lay out their thoughts (Gwendolyn, Interview).

In a regular class versus this class-it could quickly get negative in the face-to-face class; people would be uncomfortable, it would be clear that someone was uncomfortable. Because this is not face-to-face, I mean, there could be a flamewar, but it was a chance for her to speak to the reactions thoughtfully rather than start a flamewar... People take what others say seriously as partly because it's poetry and personal to them, though. People do respond to the criticism differently, and she chose to change the word. It was probably appropriate in the poem, but it was already taken out [by the time I read it] (Instructor, Interview).

Despite her worries about offending others, Marianne's discomfort with the content of Adrienne's poem generated a discussion that strengthened Adrienne's

interactions with the rest of the students in the course, and presented an opportunity for the instructor to discuss issues of tone and word choice in an authentic setting rather than a lecture.

At 4.58, Poetry Thread 39's social density score was higher than the average of 3.70 for threads in the workshop forums for the poetry course. This was primarily due to the greater number of indicators of interactive and affective social presence participants used in working through this conflict. In this case, rather than as a means of purely projecting their own personal feelings and experiences into the class, participants used personal and cultural details as a means of adding context to their choices, statements, and arguments.

Dealing with Technology

Technology was a frequent topic of conversation within the class, most frequently when a student could not find a particular item or when the course management system did not perform as expected. Quite often, the instructor made jokes about the course management system, enabling students to be critical of the system and empowering them to ask questions about it without being intimidated.

Actually, here is where you can post your bio poem as a response to this post. It's so confusing. Blackboard is evil. (Instructor, Poetry Thread 3, Week one)

Some of the stanzas appear to be 8 lines long. This is only because blackboard is being difficult. (Sylvia, Poetry Thread 27, Week six)

Sorry about Blackboard, it is a pain in the butt and does what it wants to the poems. I don't know why. Sometimes it works fine, and other times it eats the spaces up or puts in line breaks where there were none. (Instructor, Poetry Thread 27, Week six)

Students often posted their technical questions or complaints within workshop thread, or in the Miscellaneous Thoughts and Musings forums, and their questions were echoed or answered quickly by others.

One-to-One relationships

While anomalous in terms of its controversial nature, the incident involving Marianne and Adrienne was representative of many of the relationships within the course—that is, it was clearly a relationship between two people in the class that involved a personal connection that was forged in public.

Despite a handful of indirect references and rare non-compulsory replies to messages, the vast majority of participants' messages in both the Discussion/Lecture forum and the Workshop forum were direct responses to the thread's initial message, be it the instructor's lecture or the poem of a peer. Despite the author and intended reader of messages posted to the Workshop forum being clearly indicated by post metadata and the forum in which they were submitted, many of the messages in these threads contained salutations and signatures involving student names or nicknames. The high frequency of these vocatives (second most common social presence indicator in these posts, at 11.93%) reflects the direct communication intended by their authors. However, unless used to indicate the intended reader of a message, names were rarely used when a participant referred to an idea shared in another student's post:

Like someone else commented, the way you established the speaker's hatred of chairs added more meaning to the shift towards the end. (Sylvia, Poetry Thread 19, week three).

All of the participants indicated agreement or strong agreement with the question "I was able to form distinct impressions of some of the members of the course" on the

end-of-semester survey, and through interviews and responses to the open ended survey items, some of the means through which these impressions were formed were made clearer. Adrienne recognized patterns over time in the way students critiqued their peers' work by the middle of the semester:

Nothing really stood out this week, pretty much the same classmates who seem to do a strong critique still did so, and others who seem to say sweet things about all poems, did so as well. (Adrienne, Survey 2, Week eight)

Muriel felt she had a good sense of those she interacted with, and was confident that she knew a lot about their real lives.

I had my favorites, and I'd check their postings first...

I had a good sense of who I was responding to. You could tell where they were in their life, old/younger, married/not married, what kind of life experience they had... (Muriel, Interview)

She also paid attention to the timing and frequency of her peers' posts, which contributed to her impressions of which they were and to speculate on their writing process:

I took note of who and when they posted, if someone was up late on a Saturday night, I noticed that some students always posted near the beginning of the week, always consistently. I got to know people's habits. It was interesting; the students who were posting later on put more detail into their posts, the poems were more emotional. I got a sense that they were germinating, developing the ideas, and thinking about it. It took a couple of days to develop. (Muriel, Interview)

Gwendolyn admitted to quickly forming impressions of her peers based on their early creative work, and as the semester progressed, she returned to earlier postings to learn a little more about them if something they had written caught her attention.

It took a little while, but [I had a sense] right after the first poems were posted. Like, oh, I wanna read more of hers. It sounds bad, but you end up making judgments right away. I would see a side of them in their poems...

If someone was critical of my writing, I'd dig up their poem, like if they said what I wrote was a cliché, you know, that's your work! Be careful! Let's see what you wrote smarty pants! to see what they did, what to watch out for. I feel bad, but you know. (Gwendolyn, Interview)

Group Identity

A few participants made quite an effort to connect with others outside of the workshop threads, despite the lack of activity in areas of the course where student posts were not mandatory. Early on in the course, Adrienne reached out to her fellow students with a brief message in the Miscellaneous Thoughts and Musings Forum:

Thoughts.
This is the best thing I have done in a long time! (Adrienne, Poetry Thread 7, week one)

Gwendolyn and Muriel both responded to this message with similar sentiments, and it was these three students who seemed most interested in reaching out to the course as a whole during the semester. During week eleven, Gwendolyn posted a thread entitled “Local Poetry” to the forum to share information about campus poetry-related events and readings she had gathered from the instructor privately via email.

Responding to workshop survey three during week twelve, Muriel described the pride she felt in herself and her classmates: “The evolution of our poetry is so interesting. I enjoy reading every word. It is wonderful to see what we have achieved.”

And in the lone response to a posting in the Revised Poems: Portfolio Thread, Adrienne wrote how she would like to remember the class:

I would love to keep the poems of these classmates in a special book... Great class, great teacher! Thank you to all of you for sharing so openly! It's been so memorable and so positive (Adrienne, Poetry Thread 54, week fifteen).

The group identity displayed by these three participants also included certain expectations of the others in the class, and they often responded to one another's posts wherever they appeared.

Interpreting Inactivity

With the bulk of the course activity occurring in the Workshop forum, posts in other forums were often left to languish, were poorly read, and rarely received responses. Adrienne, who was very active and made a point of responding in non-compulsory threads, posted an emotional request for others to read and provide feedback on a poem her brother had written:

If you are able to take a minute or two to read & comment on my bro's poem - I would LOVE it - and TRULY appreciate it! I know you are all very busy, so I understand if you can't get to it. Also, thanks very much for the POETRY gatherings info! I'll send some if I hear of any others - as well. Thanks for sharing!! (Adrienne, Poetry Thread 44, week four)

In her survey response several weeks later, the lack of attention to her request was still on her mind.

I can only say that most of the class reads my postings that we are required to comment on, I don't know if they read others. I have had a poem on the Misc. page for many weeks, but no comments on that yet (Adrienne, Workshop Survey 4, week thirteen)

A few weeks after posting her brother's poem, she returned to this thread and posted a poem by Seamus Heaney she found inspiring but that had not been included among the poems in the course anthology. The instructor responded to this message, and within an hour, Adrienne posted again to thank her for her response, indicating that she still monitored the thread.

Muriel, who, like Adrienne was quite generous with her replies to others' messages, saw non-compulsory posting as evidence that a peer was invested in the class, but realized that not all students felt they must engage in it.

I found that everyone's participation seemed to be on target to how clear cut the expectations were. I often got the sense that some didn't feel obligated to participate [in non-workshop threads] but if people were interested, they would post. I was pleased when someone took the time to do that, it showed that they cared about the class. (Muriel, Interview)

Muriel herself posted responses to nearly every other participant's initial Discussion/Lecture forum responses during week three—even before posting her own answer, but in subsequent weeks she did not repeat this practice; she and the other students only responded to the instructor in subsequent threads.

Hidden Behaviors

In interviews with two participants after the conclusion of the course, it became clear that not all participants were aware of the extent to which the activities of their peers were not represented in the online course environment. Gwendolyn emailed with the instructor to solve problems with the course management system, but did not contact others in the class through email or any other channels. Muriel, however, did contact others in the course:

Definitely, I probably emailed with about five of the other students in the class, all on class-related things. (Muriel, Interview)

It is unclear whether other participants contacted one another outside of the course management system.

Interaction, Social Presence, and Participation Themes in the Poetry Course

A number of themes emerged from participant activity in the poetry course. Following the instructor's lead, participants were very willing to share their feelings and personalities in response to the creative work shared in the class. Gwendolyn credited the instructor with setting the tone and, though her design of the course, enabling students "to criticize but still be positive" (interview). Participants situated their criticism within messages high in affective terms and self-disclosure, showing respect for the poet's creative intent. Each new comment in a workshop thread seemed to signify a new conversation between the poet and the critic; when the rare reference was made to another critique, specifics—including the name of an idea's originator—were generally omitted.

Through these comments, participants were able to form impressions of their peers, and select those others in the class whom they wanted to follow or engage with throughout the semester. As these comments accumulated below each poem over the course of a week or more, not every student experienced the same context, or even the same poem, as others in the class. The unbounded time for interaction afforded by the asynchronous course increased the opportunity for the participants to calmly and thoughtfully relate their own experiences in response to conflict. Posting and reading behaviors differed among participants, influenced by their interest in connecting directly with others. Participants were excited to see responses to their work and watched the threads relating to their creative work closely for updates.

Though a few students felt compelled to post messages and interact in non-workshop areas, where it was not required, the lack of response to these messages created negative feelings in those who posted. Furthermore, students held varying expectations regarding the hidden behaviors of their peers; beyond the discussion board, course-related

communication took place privately among participants, the instructor, and other students.

Only one participant responded to any of the revised portfolio of poems that were posted during week fifteen. Despite the quiet end of the semester, students unanimously agreed that they incorporated their peers' critiques into their final revised poems. These themes and the sources of evidence from which they originate are summarized in table 28 below.

Sources of Themes Identified in the Poetry Course				
Theme	Sources			
	Transcripts	Surveys	CMS usage data	Interviews
One-to-one relationships are formed in comments	X	X		X
Students pay special attention to responses in threads featuring their creative work	X			X
Criticism is mediated by social presence	X			
A lack of response is interpreted negatively		X		X
Social presence aids in resolution of conflict	X			X
The time at which a student visits the forum affects how he or she can interact with others			X	
Students choose individual relationships based on comments	X	X		X
Some students attempt to serve as connectors, in contrast to norms and requirements	X		X	
Students engage in a mix of visible and hidden behaviors				X

Table 28. Sources of Themes Identified in the Poetry Course

CASE REPORT: FICTION WORKSHOP

The Fall 2010 section of Fiction Workshop 217/404 reached its maximum enrollment of 15 students before the beginning of the semester. Of those 15 students, seven consented to participate in this research study. Among the participants, two were male and five were female, five reported their age group as being in the 18-to-25 year range, with remaining two in the 26-to-35 and 46-to-55 ranges. For one student, the fiction course was his first online course. Four of the others had taken one other online course, and two of the participants reported taking five or more online courses.

The instructor of the course has taught an online section of this course each semester for the past five years. The primary work product for students in the course is a single, complete short story, but students are also expected to provide critiques of their peers' stories and respond to discussion questions and exercises.

Preparing the Online Course Environment

Prior to the beginning of the course, the instructor entered the course management environment and uploaded the syllabus, workshop guidelines, and other course documents.

Striving to set the right tone, the instructor also projected her personal sense of humor, provided an encouraging atmosphere, and even mentioned her anxieties about the course in her earliest communications with the class: setup of the discussion board, the syllabus, a welcome message, and workshop guidelines.

Forum	Instructor's Description
Workshop	Here's where you post your poems for workshop & you comment on those poems. You need to comment on ALL the poems except for your own. Really. Not joking. Thanks!
Exercises	Here's where you post your exercises under the appropriate heading. For example, post your exercise 1 as a reply to exercise 1. Thanks!
Discussion/Lectures	Lectures will be posted here. Discussion questions are to be answered as a reply to the lectures. I look forward to your thoughts! Thanks.
Advanced Lectures by Advanced Students	If you are a 400-level student you will need to post your lecture here. We will read your words with a proper amount of respect.
Questions, Miscellaneous Observations, Love Notes	The title makes it obvious what I hope will be posted here. Especially looking forward to the love notes.
Final Revised Poems: Portfolio	Please post your fully revised story here. By December 10. Then go out dancing in the streets. Or study for your finals. Or sleep, sleep, sleep like the bears who are now very sensibly hibernating through the snow, ice and cold. Thanks for all your hard work, scintillating comments and money.

Table 29. Fiction Course Forums

This class is an intensive, online workshop in the art and craft of writing fiction, primarily the short story...Through all these technical details we learn how difficult and rewarding writing a story can be, how powerful it feels to create a new world, or describe an old world in a new way. And if you are lucky or blessed or hard working, you will learn to move your reader through a precise and

beautiful language... I'm excited and honored to read your work! (Instructor, Announcement, week one)

The purpose of a workshop is to help you make a better story. In order to do this you let other people read your story and have an opinion/response to your work which feels a lot like handing someone a knife and asking them to take out your liver without anesthetic. And yes, you are paying money for this pleasurable experience. (Instructor, Workshop Guidelines [Appendix N], week one)

Blackboard can sometimes be finicky and a pain... One very good idea is to write responses, exercises etc. in Word and save them. Then copy and paste over to Blackboard. This way if Blackboard goes wonky you don't have to redo your work. (Instructor, Syllabus [Appendix I])

The Initial Week: Introductions and Assignments

During the first week of class, there was little activity in the class. Students were asked to submit a biographical story and to introduce themselves in the Exercises forum, but none had submitted these postings early in the week. The instructor sent out the following message to students three days into week one:

Subject: Hi Quiet Class

Is anyone out there? I hope so. So far it's pretty quiet, of course, that might be because you're busy working on your stories. I hope so. Or it might be because you're busy dropping and adding classes. That's highly likely. (Instructor, week One email to students)

Apart from Joyce, who submitted her assignment only an hour and a half after the instructor's message was sent, most participants did not complete the assignment until Sunday evening, the due date for weekly assignments in the course. As illustrated in Figure 11, the bulk of postings in the fiction course took place either early on in the weekly cycle or near the weekly due date. In the Exercises forum, where only the instructor tended to respond to student postings, this was not a particular problem, but the late-in-the-week posts in the Workshop forums did create a burden for other participants.

Some people have to go all the way to the deadline, but most people don't wait. It is inconvenient when they don't finish until Sunday night and you are expected to respond (Joyce, Interview).

Exercise and Discussion Weeks

After the first quiet week in the course, students began responding to discussion questions, completing exercises, and, outside of the course management system, writing the stories they would post for peer response later in the semester. Within their responses to the instructor's lectures in the Discussion/Lecture forum threads, there was rarely any interactivity among participants; they read the lectures and posted their responses, but neither the instructor nor the other participants submitted feedback on messages posted by their peers. As reported in Table 26, the social density for the threads in the Discussions/Lectures thread were 4.37, just below the overall social density score for all threads in the fiction course.

Apart from the Revision thread in the Discussion/Lecture forum, the activity in this forum took place between weeks two and six. The average views per message for threads in the Discussions/Lectures forum (excluding the instructor's lecture at the head of each thread) was 11.94, including the instructor's views, indicating that most messages were not read by all 15 students. In interviews, Joyce revealed she felt it was more honest to post without reading the work of their peers first.

I wrote my responses first because I didn't want to be influenced or feel like I was copying anyone's ideas. I posted first, and then I could read guilt-free! (Joyce, Interview).

Only in one case did a participant respond directly to her peer in this forum:

You have a very poetic, beautiful way of expressing yourself. I look forward to reading more of your work. Thank you! (Joyce, Fiction Thread 4, Week two)

Joyce, who reported having taking more than five online courses prior to the fiction workshop, was quite often the lone responder in threads and forums.

The Exercise forum was the site of much more dialogue in the early weeks of the semester. In this forum, students shared outlines, sections of dialogue among their characters, and their attempts at writing using various fiction techniques. The instructor responded personally to each student's posting, and students would often reply with questions or messages of appreciation. This accounts for the volume of participant messages in these threads, which averaged 18.2 messages—for every message posted by a participant, there was at least one response by the instructor, and at times follow-up posts from participants.

As in the Discussion/Lecture forum, the links among messages were between the instructor's prompt and the single student's submitted exercise. In no case did a participant post reactions to the exercise of another student in these threads. Joyce reported that "no one responded to the exercises except for the teacher. I didn't pay much attention" to exercise posts other than her own (interview).

Apart from the biographical exercise at the start of the semester (in which the average message was viewed over 22 times), the subsequent threads in the Exercises forum had an average of 10.79 views, below even that of the Discussion/Lecture threads.

In essence, participants spent the initial five weeks of the semester writing their stories and responding directly to the instructor. Many of the participants actively read the work of their peers in the Discussion/Lecture and Exercise thread, but there was almost no direct response or interaction among students during these weeks.

Workshop Weeks

It was not until week six, during which the initial stories were posted for critique, that interactivity and dialogue among students truly began. Joyce and Margaret posted their stories first. The perceived distance among students was mentioned by Margaret, who appeared in the comments on her own story to thank another student—to whom she refers as “a stranger”:

I've been having one of “those” weekends and a little commiseration from a stranger has me stepping back from the ledge right now. See, I'm melodramatic in real life too! (Margaret, Fiction Thread 10, week six)

Margaret and Joyce both felt anxiety about being the first to post their creative work. Margaret posted a statement before the download link to her story. Her statement pre-emptively highlighted some of the problems she saw in the story, and appealed to the class to assist her in strengthening it.

Of course, I hate this. Exposition and resolution are lacking - but god, I despise conventions. Please help me make sense of this - I know there's a story in there somewhere. (Margaret, Fiction Thread 10, week six)

This technique of qualifying a story or asking the group for a certain type of help was often used by other participants who were uncomfortable releasing their stories to the class without what they felt was proper context.

I would really appreciate some suggestions and feedback for possible endings. I have not written one yet and am debating between a few ideas. Any thoughts or suggestions on what would make the story better would be great. Thanks! (Toni, Fiction Thread 17, week ten)

This was not always the case, however, as evidenced in Joyce's story thread, posted the same week as Margaret's. She merely started the thread with a direct link to download the file containing her story “The Day She Left.” The lack of an expectation-setting statement was no indication that she was comfortable sharing her work. She

admitted being “worried I wasn’t doing it right, but I decided I just had to jump off.” (Joyce, Interview).

The response and criticism that accumulated under each story over the course of the semester involved much praise and encouragement, but there was a high level of focused criticism involving story structure, grammar, and mechanics. Response to the peer critique from story writers was limited, but usually involved gratitude:

Thank you all for your criticisms! You helped me to realize a lot of very good points about my story. It seems that I have not accomplished what it was I set out to do, and have given you an incomplete story. (Edgar, Fiction Thread 18, week eleven)

In the end-of-semester survey, no participant disagreed with the statements “I felt that my writing was critiqued fairly” or “I incorporated the suggestions of other course participants into my work.”

When textual criticism was shared in response to a particular story, it usually handled delicately; often preceded by self-disclosure (“I was a little thrown off...” [Louise, Fiction Thread 17, week ten]; “I’m not quite sure...” [Mark, Fiction Thread 16, week nine]) indicating that the critic was giving the author of the story the benefit of the doubt. Louise and others used this technique in week six, in response to capitalization in Joyce’s story:

One question I have is why do you capitalize Daughter, Son, Mother, Brother in the story. If there is some significant meaning behind it then I think you should mention it early on because to me I was so curious about the meaning of that, that I was getting distracted. If it was a mistake, that's an easy fix then! Hope this is of some help. (Louise, Fiction Thread 11, week six)

Throughout the semester, participants used this strategy to maintain positive social presence and situate their criticism in their own reading—many made it clear they felt they may have misinterpreted the author’s intent.

The instructor, who reserved her responses to the students' stories until their peers had a chance to post, sent the following message at the end of week six, validating the students' work during the first workshop week:

I do want to thank you for your responses to Joyce and Margaret's stories. I have read through them and they appear to be helpful (although I am not Margaret or Joyce so I could be wrong), well-reasoned and interesting meditations on the work. Keep it up! I'll chime in with my own wacky thoughts this week. Margaret and Joyce, you were very brave (also you had no choice) to go first, and I salute you. (Instructor, week seven email)

In addition to the support and constructive criticism evidenced in the peer reactions to stories, participants used their responses to indicate ways in which the stories resonated with their own lives.

The character seemed awfully calm during the explosion and after. I bet you could have some fun adding some more emotion into him and some more development... I have to tell you I spoke to a man this evening that works [at the Local Nuclear Plant] and I immediately was brought back to your story and it was kind of a weird feeling. Great Job! I don't know if you did it on purpose but you changed font from Cambria 12 to Times Roman 13. I wasn't sure if that was an effect you were intentionally included (Joyce, Fiction Thread 14, week eight).

I think as a reader, if you elude to Krystal's own personal conflicts/ life choices, we, the reader might get a greater sense of why shes running. Why she passed up college to move to Baltimore, just to make ends meet. Personally having been, practically on my own before, I understand what its like to struggle for money, and wonder what and where life takes us. Planning our lives out, and being expected to know what we want to do and be is especially frustrating. I think many people can relate, in some way to this story (Edgar, Fiction Thread 16, week ten).

Margaret, this was remarkable. You truly have a tremendous talent. Your audacious topic and choice of characters is brilliant. Someone else made the comment that reading this made them feel unintelligent...yeah, I felt the same way (in a good way) (Grace, Fiction Thread 10, week six).

In the interviews conducted after the class ended, Joyce and Mark both indicated that they monitored the threads featuring their stories more vigilantly, and even awaited

responses by certain students with whom they had become acquainted. As Margaret did above, participants often reappeared within the threads where their work was posted in order to thank a student for a specific comment or request clarification.

I'm glad you caught me on my unauthentic usage of the firearms, I should have known better than to put anything into my story that wasn't 100% correct or authentic. I ran out of time, let it slip and what do ya' know, you caught me on it. Touche! (Edgar, Fiction Thread 18, Week ten).

Mark returned to his story's thread "pretty often, because I wanted to see what they thought. Some hadn't posted by the deadline, so even after the week, I'd keep checking back. And [the instructor's] responses, I checked back for her" (Mark, Interview).

Based on the supportive, helpful (and at times not-so-helpful) responses, participants were able to form impressions of some of their peers during the second half of the semester. All but one participant indicated agreement or strong agreement with the statement "I was able to form distinct impressions of some course participants" in the end of semester survey, and no student disagreed with the statement.

Shifts in tone among a single participant's responses indicated different levels of comfort with particular students in the class, and interviews confirmed that peers were perceived differently based on their activity in the discussion board. For example, Margaret wrote her critique of Edgar's story in quite a different voice than she employed in her response to Joyce a few weeks before.

It was lovely to read your story - I feel that there is a universality to the doubts and fears that can be recognized by any parent. I am not a parent, but I can plainly see aspects of my mother and father in the speaker...The next step is proofreading. There are frequent errors in tense, grammar, sentence structure and format. Some pieces are hard to make sense of because of mismatched diction and sentence fragments...Thank you and happy revising! (Margaret, Fiction Thread 11, week six).

In short, I'm a fan of you. HOWEVER - and I know you already addressed this - but damn, you really need to proofread this shit. I'm not trying to be harsh, but the misspelling, sentence fragments, and extra words (or wrong words, i.e. through instead of threw or taylor instead of tailor) were present in just about every other sentence.... I'm only saying this because I want to focus on your excellent writing and nothing else... I could talk a lot more about this SO plan to see me at [a local bar] someday soon, ordering a dirty martini and chatting you up. OK? (Margaret, Fiction Thread 18, week ten).

In these two examples, Margaret makes similar criticisms of two students but treats them quite differently—she identifies Joyce with a parent and delivers a kind and reverent response, but is playful but abrupt with Edgar, whom she appears to view as a peer. The way in which Margaret chose to end each message is also telling. In comparison to her invitation for a real-world meet-up with Edgar, the “Thank you and happy revising” sign-off to her message Joyce’s story sounds like an indication that this will be the last interaction she expects to have with Joyce.

Levels of trust and respect, and consequently levels of attention to a peer’s activity, differed among the participants as well. Joyce remembered a particular student who “got attackish” on the discussion board, and rather than engaging with her, Joyce merely thanked her for her comments, and went back to “just paying attention to things [she] liked” (Interview). Joyce “gave more weight to reviewers that seemed more mature, but treated the reviews consistently the same” because she felt that, for the most part, students weren’t just filling the word quota, but were “responding with their intellect” (Joyce, Interview). “I was very aware. I knew what to expect of people, and once I’d read their other material, I definitely got a sense of who was critiquing and where they were coming from.”

Mark saw the common goal he shared with his peers—to improve his writing—as reason enough to trust their criticism of his work. “I was completely trusting, I had no

doubts about that, I figured we were all in it to win it, so there were no trust issues”

(Interview). He paid closer attention to some peers than others:

In the beginning people posted pictures but I forgot those. When I read stories, I had an image of these people that was completely fabricated, something I imagined based on their posts.

You really did get a sense with the frequency of posting that everyone had a different style. I got a real feel for what these people were like, and I thought that was cool. The tone came through, how they thought about things came through. On the posting in my stories, there were people I was particularly interested in hearing from because I liked the insights they provided.

Even among my classmates I gave different weight to comments based on who was giving them. (Mark, Interview)

Impressions of peers generated though responses to stories also led to connections outside the course.

I happened to take my time on one response, while having to rush another, shorting myself some credit. The young lady I spent more time on, sent me a friend request on Facebook. (Edgar, Survey 1, Week six)

The workshop schedule reveals that the sender of this friend request was likely Margaret, who posted the playfully impolite response to his story during week ten. If these two began a relationship outside of the class, this might also account for the differences in tone among Margaret’s critiques to her peers’ work.

All of this peer-to-peer activity in the discussion board a social density score of 6.47 for the Workshop forum, well above the 4.52 average for the class and the highest score for all six forums. The average participant-posted messages per thread in this forum was 10.43, indicating that, in most threads, one or more of the participants or the instructor posted more than the one compulsory response.

Messages in the workshop thread were viewed more frequently than messages in other forums. Average view per message in the Workshop forum were 14.42,

substantially higher than the Exercises and Discussions/Lectures forum, but not high enough to indicate that every student read each message, particularly those posted later. This could be evidence that participants were more interested and engaged in these threads, but as Joyce and Mark indicated, participants themselves returned to and viewed threads containing their stories more than others. The increase in views could have been caused by more intense attention by storywriters to their own threads.

Processes of Reading and Writing

Previous quotations from participants and the weekly posting cycle reveal differences among participants' approaches to reading and writing within the course. Interviews and open response items on the surveys contributed further insight into the diversity of student behaviors.

Joyce indicated that she was able to keep up in the course "by not reading everything," and by focusing primarily on the posts written before hers. She didn't generally check back over the course of the week for new posts, except to keep an eye out for responses from two or three students she liked and to monitor new responses to her own work. "I didn't jump between threads unless it was someone's work I really liked or someone I liked hadn't posted by the deadline"(Interview).

Mark, however, read postings on the discussion board throughout the week, but often found himself posting just before the Sunday night deadline, when he had a quiet shift at work where he could pull together his notes and ideas:

Usually I would read throughout the week. Sundays at midnight were usually the deadline for posting, and I worked at the bookstore from 6 - 11, and no one comes in so they let me do my homework, so that's when I'd respond. Then I'd head home and post on Blackboard when I got there. I had a notebook I used for

thoughts, to outline, for very loose notes on what I'd say, then I'd go back and type it at home and post it then" (Interview).

Though he read the stories and threads during the week, Mark posted feedback on the day of the deadline or shortly thereafter on four of his six participant peers' stories.

There were occasions where I'd be one of the last people to post, and I didn't read all of the posts-- I might read a few posts to see if there was something I had to relate, but in a lot of posts everyone would refer to each other's comments, but since mine were later, it wouldn't have been read. I don't know if they went back to read them. For the story posts, you could definitely tell if they said specific things, something they wouldn't have known without reading. The point is, though, that I was interested that those were the ones that everybody read. I wanted them to read my story (Interview).

As Joyce and Mark represent different models of reading and responding to the work of their peers, and in each case the choices they made exposed them to a slightly different view of the course. Joyce, posting early, likely did not encounter Mark's postings, which came much later, unless he happened to be one of the people who had caught her attention in earlier weeks. Mark watched as messages accumulated over the course of the week, but his process created a barrier to his ability to interact—he only had so much time between when he began posting and the week's deadline. Depending on what approach each student took, their awareness of others in the class could have been quite different.

Awareness of Others

Some participants felt they were well aware of the activities of at least some of the other students in the course. Margaret indicated that she paid attention to the requests of authors in her feedback in order to provide a meaningful critique (Survey 4, week twelve). Toni aimed to involve others emotionally in her story after viewing the emotional connections made by others who posted their stories before she posted hers

(Survey 1, week seven). Mark “paid attention to the numbers of times things were viewed and commented,” but he did not refer back to earlier weeks’ posts “unless it was something the professor said or outlined. I didn’t go back to other students beyond the relevant week” (Interview). In the Exercise thread during week four, Mark posted his dialogue excerpt twenty minutes before the deadline, but when he checked back during week six, the instructor still had not responded. He made an attempt to alert her in the thread.

Instructor, I think you accidentally skipped my exercise! I love reading what you have to say, it is wildly helpful. Thank you! (Mark, Fiction Thread 5, week six)

It was not until three weeks later that the instructor noticed Mark’s appeal for feedback and responded.

ACK! How did I miss this? I blame it entirely on Blackboard, it couldn't be my fault could it? Anyway, I'm sorry and here are my thoughts... But good job and I do apologize for missing this somehow in the first round. (Instructor, Fiction Thread 5, week nine)

This incident speaks to the difficulty participants in the study had keeping up with everything that occurred in the discussion board, and perhaps why several students didn’t bother to read every posting. However, when an expected response did not come, the correct process for garnering the attention of others or directing them to the thread in question was not straightforward.

Weak References and One-to-One relationships

The structure of the course and the patterns of behavior described by participants supported strong relationships between each student and the instructor, and among some students, but in no threads did a third participant engage in or expand a conversation already taking place among two participants. In the content analysis portion of this

research, the code “Referring to others’ messages” accounted for only 6.15% of affirmative coding decisions in the fiction course, indicating a low presence of linkages and shared ideas among messages posted within a thread. In the cases where references were present, they were quite often “weak references,” in that they indirectly referred to messages (“I think someone else mentioned something to this effect,” [Mark, Fiction Thread 16, Week nine]) rather than drawing a particular student’s identity or idea into the discussion.

Another representation of the direct one-to-one communication occurring in the discussion board was the manner in which participants framed their messages to their peers. Much like a letter or email message, participants included salutations and recipient names at the beginning of messages, and signed them at the end. This practice was so widespread that the interactive social presence indicators vocatives (use of names) and phatics/salutations accounted for 24.79% of codes applied in the fiction course (13.30% and 11.49% respectively). This custom may have arisen from the instructor’s use of the technique in the Discussion/Lectures and Exercises forums. Some students made consistent use of vocatives in novel ways, such as using only initials (Edgar) or leading with a compliment in which the story’s author is named “Nice Job, Louise,” or “Wow, Margaret” (Joyce).

Hidden Behaviors

The emphasis on direct communication between individual members of the class also had the impact of encouraging some hidden behaviors. Some activities, like the Facebook friend request Edgar received from another student, understandably remain

hidden from the view of others in the course management system. But at least one student reached out to her peers outside of the discussion board.

There were two people-- one especially was an inspiration. In private emails he helped and supported me. That happens often, supporting each other behind the scenes (interview).

Additionally, Joyce used email to apologize to another participant she felt she had treated harshly, something that “would have been too intimidating to do in person” (interview).

Not all participants were aware of this activity. According to Mark, all of his contact with others in the course was in the discussion board; he had used no other channels to reach out to the others students.

Social Presence as a Barrier

In some cases, the high levels of social presence led to confusion. Joyce felt that one provocative student shared too much of his abrasive personality, and felt annoyed that she had to spend her time “something he wrote that was obnoxious bullshit” (Interview). Toni felt that a peer chose to reveal that he or she “did not read thriller novels” rather than respond with meaningful feedback on a story, which was written in that style (Survey 3, week eleven).

Despite setting the deeply encouraging and playful tone and maintaining a very high level of social presence in all of her communication with students, the instructor’s humor and expressiveness created confusion in at least one case. A week after Margaret submitted her dialogue exercise, consisting of two passages in which two characters offered clipped sentences and single-word answers, the instructor posted the following poetic feedback:

Margaret,
Funny.
Confusing.
I like the repartee.
They
feel like poems.
I like
the humor.
I don't
really understand
what is going
on.
Do I
get to pick?
I can't
decide which
one I like better.
Maybe
both.
However
I would like at some
point.
A little background.
A little clarity.
The emotions
though
are coming through,
if the emotions
you want to come
through are
annoyance
curiosity
silliness (is too an emotion)
and
bewilderment.
Good job.
Thanks,
Instructor (initial only)
(Instructor, Fiction Thread 5, week five)

The next day, Margaret expressed her confusion, joking with the instructor, a poet, about her role as a teacher:

that wasn't one of your better poems.
are you
saying
it wasn't my
best
either?
teach me oh tutorial one.
(Margaret, Fiction Thread 5, week five)

Later in the day, the instructor responded to clear up the confusion with more concrete, if self-deprecating, feedback:

No, no, I didn't mean to imply that at all, sorry, words are hard. I really like these dialogues very much, but I'm a little confused about how they relate to the outline you presented (and maybe they don't). They read like poems in that they could stand alone, weird little insights into strange situations. Like prose poems, but all in dialogue... It would be much more experimental than a typical story, but interesting. Sorry about the misunderstanding, I like but am confused. Which is my typical state of affairs. (Instructor, Fiction Thread 5, week five)

In this case, Margaret clearly picked up on the social presence in the instructor's message, but expected feedback with more teaching presence. Upon reading the second instructor post, it is clear that the feedback is instructive, but the teaching presence message was overshadowed by the instructor's socially expressive response.

The End of the Semester

After the conclusion of the Workshop portion of the fiction course, the activity level in the course environment fell to pre-workshop levels. During the final week of the semester students submitted their final stories to the discussion board. While there were no responses to participants' stories in this forum, both Edgar and Margaret (who submitted her story late, during week sixteen) included a send-off message with their posts.

Thank you all again for your comments. If I never got to your story, C'est la vie!
:) (Edgar, Fiction Thread 28, week fifteen)

So sorry for my tardiness. Although this is my "final" revision, it's really not. I
want to keep writing this story, and that includes endless editing :) (Margaret,
Fiction Thread 31, week sixteen)

Late in week fifteen, Joyce posted the a message in the Questions, Miscellaneous
Observations, Love Notes forum, which had been empty up to that point.

Merry Christmas Instructor,

I didn't want the class to end with your section for "love notes," left empty. I
wanted to tell you your humor and light heart has been a blessing. There were
many days you made me smile. Your skills and lectures have been very helpful to
learn to be a better writer and find my own voice. I appreciate all that you are as a
teacher and a person. I wish you the very best life has to offer. Thank you for
being you.

Happy Holidays,

Sincerely,

Joyce (Fiction Thread 24, week fifteen)

The instructor responded to Joyce's message with a message for the entire class.

Oh I've always wanted love note thread! Pshaw, and thanks so much and you
guys have been great students. I hope the holidays are nice to you and all your
love ones. Happy Break! (Instructor, Fiction Thread 24, week fifteen).

Despite being addressed to the entire group, the message was only viewed 7
times, so it is unlikely that many students even saw this message. The former eagerness
to read and engage in peer critique was not present in the revised story threads.

Interaction, Social Presence, and Participation Themes in the Fiction Course

A number of themes emerged from participant activity in the fiction course. The
first several weeks in the course saw little direct interaction among participants, but
during these weeks students became well acquainted with the mechanics of fiction, and
were exposed to the instructor's critiques of the creative work they posted. Once the

workshop began, peer criticism in the fiction course was direct, and focused on grammar and story mechanics, but was mediated by social presence, primarily self-disclosure and humor. The instructor's approach to criticism in the exercise threads established norms for the content of these messages, and also likely influenced their form. Participants followed the instructor's lead in addressing their messages directly to one another, making wide use of each other's names, and signing their own preferred names (in contrast to Blackboard's display of users' full names) to their criticism.

Some participants shifted the tone of their criticism based on their perception of a particular classmate. These impressions were formed through reading of the stories and critiques posted in the discussion board, though some students did contact one another in ways that were hidden to other observers. Direct, one-to-one relationships emerged in the discussion board, but at no point throughout the semester did more than two participants actively engage in discussion within the Exercises, Discussion/Lectures, or Workshop forums. On the rare occasions that a third student's ideas or postings were mentioned in a message, the reference was usually a weak one—participants spoke of their peers in vague terms and generally brought up others' responses to support a particular criticism they made or in order to avoid writing something similar.

Though students only rarely referred to one another's messages, they felt they were quite aware of the activities of others. A participant's awareness of what others had written or read was related to his or her approach to reading and writing in the course. Some participants indicated a special, higher level of attention to the threads in which they posted their own work. In some cases participants presented their work with qualifying statements or specific requests for feedback, and the degree to which they took critiques seriously. Through the impressions they formed based on a peer's story or treatment of others' stories, some participants chose particular classmates to whom they

would also pay special attention, at times extending this relationship into additional environments or communications channels.

In at least one case, the high degree of social presence that became the norm for postings in the fiction course acted as a barrier—humor in a post got in the way of the instructor’s intended constructive criticism.

The instructor and participants dealt with the large amounts of text created in the course in a variety of ways, and with differing schedules. In cases where expected messages were missed or ignored, participants had difficulty alerting one another. Once the workshop weeks concluded, interaction among participants declined.

The sources of these themes are detailed in table 30 below.

Sources of Themes Identified in the Fiction Course				
Theme	Sources			
	Transcripts	Surveys	CMS usage data	Interviews
One-to-one relationships are formed in comments	X	X		X
Students make weak references to the work of others when responding to a specific peer	X			
Students pay special attention to responses in threads featuring their creative work	X	X		X
Awareness of others' behavior affects how students operate in the course				X
Social presence can act as a barrier to communication	X			
Some students attempt to serve as connectors, in contrast to norms and requirements	X		X	
Students choose individual relationships based on comments	X			X
Criticism is mediated by social presence	X			
Students engage in a mix of visible and hidden behaviors				X

Table 30. Sources of Themes Identified in the Fiction Course

CROSS-CASE ANALYSIS

The data collected in the poetry and fiction courses were analyzed and treated separately in order to present independent case reports describing the specific story of each course. In this section, the cases will be discussed in comparison to one another, similarities and differences will be explored, and the themes emerging from each will be considered together.

Differences in Course Structure

As discussed in Chapter Three, the fiction course and the poetry course share an instructor and a similar structure. In both cases, students are led through the same types of activities: discussion questions, exercises, and workshop. However, the two classes run on slightly different schedules to accommodate the different work products expected of the students—a single short story in the fiction course, and a portfolio of four poems in the poetry course. In the poetry course, the workshop phase began in week three, and students responded to up to eight poems per week. In the fiction course, the workshop phase did not begin until week six, and students responded to two short stories per week.

By the end of the semester students in the poetry course had critiqued the work of each student four times, and had their work critiqued four times by each classmate. In the fiction class, students posted their short story only once, during the second half of the semester. Students in the fiction course, therefore, had fewer threads in which to interact with their classmates regarding the creative work shared in the course. The table below compares the workshop threads featuring poems or threads by participants.

Comparison of Workshop Threads		
Course	Number of Workshop Threads Featuring Participants' Writing	Weeks in Workshop Phase
Fiction course	7	6 weeks (week 6 – 12)
Poetry Course	28	11 weeks (week 3 – week 14)

Table 31. Comparison of Workshop Threads.

In both classes, the workshop threads were the location of most interaction and discussion among students. However, in the poetry course, this workshop phase was active for nearly twice as long as it was in the fiction course, and featured four times as many threads. In the poetry course, students experienced more opportunities to engage with their peers and get to know them through required direct contact. Contact with the instructor, however, was relatively equal between the two courses. In the fiction course, the first several weeks of the course were focused on exercises. The instructor responded to each student's written exercise individually, providing formative assessment and constructive criticism on the fiction students' work in progress, much like she provided in her response to the poetry students' bi-weekly poetry assignments.

Despite the fact that students in the poetry course were afforded more opportunities to get to know one another, many similar themes arose between the two cases with regard to how participants perceived and dealt with one another.

Differences in Participants from the Two Courses

The participants from the two courses comprised relatively similar groups, with a few notable exceptions. Only female students in the poetry class consented to participate in this research study; in the fiction class two participants were men and five were women. In both courses, the majority (5 in both cases) of participants were in the 18-to-

25 age range. In the poetry course, two students were in the 56-to-65 range, and one was in the 26-to-35 range. In the fiction course, the two older students were in the 26-to-35 and 46-to-55 age ranges.

In terms of experience in online courses, the two groups were also relatively close. For the majority of students in both courses, the fiction or poetry course represented their first or second course; one participant in the poetry course and two participants in reported that they had taken five or more online courses.

Among the eight participants from the poetry course, five were in the 18-to-25 age range, one was in the 26-to-35 age range, and two were in the 56-to-65 age range. For all but one, the poetry course was their first (5) or second (2) online course, and one participant had taken five or more online courses.

The groups were evenly matched with regard to the media preference groups. Based on the media preference composite scores calculated in the analysis reported in Chapter Four, each course featured three participants in the low media preference course and four in the high media preference course (the student who did not complete the poetry course surveys was not assigned to a group). Membership in the high and low social presence groups was not uniform between the classes. In the fiction course, four participants were assigned to the low social presence group, and three to the high social presence group. In the poetry course, two participants were assigned to the low social presence group and five to the high social presence group.

A Comparison of Themes Present in Each Case

Analysis of the evidence collected in both cases revealed a variety of themes at play in each course. Several common themes emerged, as well as themes which are

closely related to one another but expressed differently in each course. Additionally, two themes were represented in contrasting ways between the two cases, and one theme was present in only one case. These comparisons, which are discussed below, are summarized in table 32.

Comparison of Themes in the Fiction and Poetry Courses	
Poetry	Fiction
Common Themes	
One-to-one relationships are formed in comments	One-to-one relationships are formed in comments
Students pay special attention to responses in threads featuring their creative work	Students pay special attention to responses in threads featuring their creative work
Students choose individual relationships based on comments	Students choose individual relationships based on comments
Criticism is mediated by social presence	Criticism is mediated by social presence
Some students attempt to serve as connectors, in contrast to norms and requirements	Some students attempt to serve as connectors, in contrast to norms and requirements
Students engage in a mix of visible and hidden behaviors	Students engage in a mix of visible and hidden behaviors
Students make weak references to the work of others when responding to a specific peer	Students make weak references to the work of others when responding to a specific peer
Related Themes	
The time at which student visits the forum affects how they can interact with others	Awareness of others' behavior affects how students operate in the course
Divergent Themes	
Social presence aids in resolution of conflict	Social presence can act as a barrier to communication
Independent Theme	
A lack of response is interpreted negatively	

Table 32. Comparison of Themes in the Fiction and Poetry Courses

Common Themes

One-to-one relationships are formed in comments

In both courses, the vast majority of participant messages were intended for a particular classmate or for the instructor. Only in rare cases where participants sought technical help or posted messages to non-workshop threads were the intended readers of a the message not explicit. Through these comments, some participants in both courses began to form impressions of others and to recognize patterns of behavior—who offered good feedback, who waited until the last minute to post—and build relationships based on these impressions. In the fiction course, one participant’s tone shifted considerably depending on the students she critiqued. The comments on a particular post also provided students with a historical perspective on certain classmates who caught their attention late in the semester. In some cases, interactions in the comments on a particular post led to continued communication via email and other non-public channels.

Students pay special attention to responses in threads featuring their creative work

Participants in both courses indicated that they referred back more frequently to the threads in which their creative work was posted. Many of these participants expressed their appreciation of their classmates’ feedback with multiple appearances in the thread. Mark (fiction course) and Gwendolyn (poetry course) both expressed an awareness of who hadn’t posted in their threads, which led them to continuously monitor the threads for new activity. Additionally, participants referred to the comments on their creative work as they revised their poems for final submission. In the final survey, not a single participant disagreed with the statement “I incorporated the suggestions of other course

participants in my work,” and several students reported on the helpfulness of specific responses in the workshop surveys.

Students choose individual relationships based on comments

The common themes listed above are also reflected in the way many participants chose to experience the course. In both courses, participants indicated that they identified particular classmates whose writing and feedback was interesting, or whose style they admired. These relationships did not necessarily involve direct communication beyond what was required, but affected where participants spent their time in the online course environment.

Criticism is mediated by social presence

In both cases, participants embedded their criticism in humorous statements or statements of vulnerability and self-disclosure. The similarities in this regard are likely due to the instructor’s guidelines and example for how work should be critiqued. She believes there are differences between the ways the students approach criticism.

Poetry is much more touchy-feely. The work they do is often personal themes, and their postings are more revealing... When someone writes a poem about a grandmother, people will talk about how much it reminds them of their [own] grandmother.... Fiction is a little snarkier. In poetry they assume that it’s a personal or true story, and that changes how they approach critiquing it. You can’t criticize what happened to someone, especially if it’s their feelings (Instructor, interview).

Relative levels of social presence indicators in two classes can be interpreted to support the instructor’s belief. “Complimenting and appreciating” codes, which were applied to messages with supportive messages, comprised 22.29% of the total codes for

messages in the poetry course, but less than 15% in the fiction course. Alternately, valid “Asking questions” codes, which were applied in cases where specific questions were asked of participants, appeared in the fiction course (10.12%) at nearly twice the rate than in the poetry course (5.96%). Though this may indicate that students in the poetry course were more effusive in their critique and fiction students more critical and inquisitive, the fact that fiction students were exposed to several weeks of the instructor’s critiques before attempting their own may have played a role. The instructor tended to employ lots of questions in her responses to students. This extended exposure to the instructor’s critical style may also have influenced the use of vocatives and salutations in the fiction course. Participants in that course invoked the names of their peers and signed their own names to messages more frequently (24.79% of codes were “Vocatives” and “Phatics/Salutations”) than participants in the poetry course (20.42%). Addressing messages to specific participants and signing them was also a characteristic of the instructor’s style.

The shifts in tone among responses by a single student in the fiction course may also support the instructor’s belief. Margaret’s playful exchange with Edgar could easily be considered “snarky,” and she was more reverent in her treatment of Joyce, whom it seems she assumed was telling a true story.

The high social presence group may have featured more poetry course participants than fiction course participants, but the low number of statistically significant differences among survey items on the incoming and end of semester survey demonstrate that the courses are likely quite similar with regard to social presence. Differences made evident in the content analysis, when viewed in light of the schedules in the two courses, suggest that the different critical styles may be the result of norms constructed within the

class, rather than an inherent difference in the styles of students interested in a particular genre of writing.

Some students attempt to serve as connectors, in contrast to norms and requirements

In both courses, certain students deviated from the typical posting behaviors displayed by most students. In the fiction course, Joyce posted a total of 43 messages, well over the average of 34.14. As discussed in the case report, many of these posts appeared in response to student discussion responses, reactions to the lectures by advanced students, and as the original message in the only active thread in the Questions, Miscellaneous Observations, and Love Notes forum. At 70 and 69 posts respectively, Adrienne and Muriel both posted well above the poetry course average of 41.38 messages.

All three of these participants reported being over 45 years old, and all generated social presence composite scores above the mean of 3.84, placing them in the high social presence group. Furthermore, Joyce and Muriel were also members of the high media preference group, and both reported taking five or more online classes. Adrienne was in the low media preference group, and the poetry course was her first online course.

In both courses, these participants demonstrated the strongest interest in group identity, and interviews with Joyce and Muriel revealed that, based on their experience, both communicated with others in the course via email. These participants' attempts to build group cohesion through non-compulsory posting and reaching out to their peers reflects a different set of expectations for classmates, and in the cases of both the fiction and poetry courses, the majority of students did not share these expectations.

Students engage in a mix of visible and hidden behaviors

Participants in both courses reported using non-public channels of communication to ask technical questions of the instructor, to exchange feedback with a specific classmate, to address conflict, or to socialize outside of the context of the course. Those who engaged in these behaviors, like Muriel, who emailed several students in her course, felt it was something that happened frequently in online classes. However, new online students like Mark and Gwendolyn felt that all of the course activity took place in the discussion board, with the exception of private email exchanges with the instructor.

Students make weak references to the work of others when responding to a specific peer

In their peer critiques, participants often referred to messages posted prior to their own. Most often they chose not to refer to a specific student by name, or even a concrete idea. Rather, participants frequently used phrases like “I know someone else mentioned (Louise, Fiction Thread 14, week eight), “Like many of my classmates...” (Grace, Fiction Thread 6, week four) to support points they intended to make. Despite the fact that peer critiques in the poetry course were often less direct and more personal, references among messages were equally as vague: “I have to agree with other peoples’ comments...” (Emily, Poetry Thread 14, week three); “Now that I’ve read one of the other comments...” (Adrienne, Poetry Thread 15, week three).

Related Themes

The time at which a student visits the forum affects how he or she can interact with others & Awareness of others' behavior affects how students operate in the course

In the poetry course, the controversial poem posted by Adrienne provided an example of how the tone and content of a thread could change over the course of the week. When Marianne posted a request that she edit the poem after two initial positive responses, Adrienne removed the offending term. Unless subsequent students scrolled through several responses before posting their own, they would be unaware that the original had been changed, and would therefore be unable to give feedback on the offending issue. This theme is closely related to an issue which surfaced in the fiction course. Joyce, who often posted early in the week, tended only to read the messages written by those before her. Because many of the students whose comments she enjoyed reading tended to post later in the week, she would return to threads in which she had already posted just to find their posts. This enabled her to complete her work on her own schedule, but caused her to only selectively read (or selectively ignore) the posts of many of her peers. Students who accessed the course environment on a different schedule, or viewed the course through the postings of another set of preferred classmates might develop a very different impression.

Divergent Themes

Social presence aids in resolution of conflict & Social presence can act as a barrier to communication

Incidents from both cases highlighted in the reports point to the capacity for participant displays of social presence to both resolve and complicate matters. The incident with Adrienne's Hayden-inspired poem described above represents the manner

in which social presence in the online course environment allows conflict to be treated a greater degree of sensitivity than might have been possible in a face-to-face workshop. Marianne was able to present her objection to the poem in a calm and thoughtful manner, and, in turn Adrienne shared many details of her life experience in her responses to Marianne and other students as the week progressed. The instructor felt that a similar situation in a face-to-face course would have become negative very quickly, due to the heightened awareness that a member of the group was very uncomfortable. Because Adrienne was afforded the space and ability to respond with high levels of interactive, affective, and cohesive social presence, the incident did not disrupt the workshop, and may have enhanced it.

In the fiction course, the instructor's parody of Margaret's dialogue exercise also revealed a thoughtful, humorous, and engaged response. The parody reflected a close attention and understanding of Margaret's dialogue, and echoed the support and humor customary in the instructor's messages. However, the meaning of the message was not clear to Margaret. In the instructor's subsequent explanation, she reveals a deeper instructional meaning of the poetic parody.

Independent Theme

A lack of response is interpreted negatively

While there were messages in both courses that received no reply, it was only in the poetry class where participants were clearly bothered. Adrienne's message regarding her brother's poem went unanswered for the entire semester, and weeks after it was posted, she was still disappointed that no one had responded. Muriel felt that posting and responding to messages outside of the requirements indicated that a student cared about

the course, but that most of her classmates chose to post only where required. In the fiction class, Joyce realized that there were areas, like the Exercises forum, where students didn't interact with one another, so she just paid less attention to those threads rather than worry about them.

Summary

The case reports and cross-case analysis discussed in this chapter present a variety of themes related to students' use of interaction traces to approach, interact, participate in and navigate an online creative writing workshop. The following chapter's discussion will relate these themes directly to the research questions outlined in Chapter Three. Additionally, the other modes of presence comprising the Community of Inquiry framework will be discussed in the context of the fiction and poetry courses, and I will consider the implications of these findings for the design of courses and course management systems.

Chapter 6: Discussion

This chapter considers the quantitative and qualitative results of the research project as a whole. Results from the Chapters Four and Five are presented together with regard to each of this study's research questions. Additionally, the results are discussed within the Community of Inquiry framework, and implications for this study on the design of online courses and course management systems are considered. Finally, directions for future work with interaction traces in instructional environments will be considered.

DISCUSSION OF QUANTITATIVE AND QUALITATIVE RESULTS

Results from the content analysis, survey response analysis, and course management system usage data analysis portions of this study were used to aid interpretation of qualitative data in the case reports and cross case analysis of the previous chapter. These exploratory reports were intended to describe the specific events and activities taking place in the creative writing workshops. In this section, each research question will be considered in discussion of the quantitative and qualitative results. Table 33 indicates the research questions addressed by each quantitative data analysis method undertaken.

Data Analysis Methods and Research Questions Addressed				
Data Analysis Methods	RQ1	RQ2	RQ3	RQ4
Comparison of participant survey responses over time		X		
Comparisons between Social Presence Composite Groups	X			
Comparisons between Media Preference Composite Groups			X	
Descriptive Analysis of Course Management System Usage Data		X	X	
Content Analysis of Discussion Board Transcripts		X		X
Social Density Comparisons			X	X

Table 33. Data Analysis Methods and Research Questions Addressed

Tables 34 through 37 indicate which themes from the case reports were instructive in addressing the individual research questions. Results from both chapters are discussed with regard to each research question under the section headings below.

Common Case Report Themes and Research Questions Addressed				
Common Case Report Themes	RQ1	RQ2	RQ3	RQ4
One-to-one relationships are formed in comments		X		
Students pay special attention to responses in threads featuring their creative work	X	X		
Students choose individual relationships based on comments	X	X		
Criticism is mediated by social presence				X
Some students attempt to serve as connectors, in contrast to norms and requirements		X		X
Students engage in a mix of visible and hidden behaviors		X	X	
Students make weak references to the work of others when responding to a specific peer				X

Table 34. Common Case Report Themes and Research Questions Addressed

Related Case Report Themes and Research Questions Addressed				
Related Case Report Themes	RQ1	RQ2	RQ3	RQ4
The time at which student visits the forum affects how they can interact with others (Poetry Course)			X	
Awareness of others' behavior affects how students operate in the course (Fiction Course)				X

Table 35. Related Case Report Themes and Research Questions Addressed

Divergent Case Report Themes and Research Questions Addressed				
Divergent Case Report Themes	RQ1	RQ2	RQ3	RQ4
Social presence aids in resolution of conflict (Poetry Course)	X	X		X
Social presence can act as a barrier to communication (Fiction Course)				X

Table 36. Divergent Case Report Themes and Research Questions Addressed

Independent Case Report Theme and Research Questions Addressed				
Independent Case Report Theme	RQ1	RQ2	RQ3	RQ4
A lack of response is interpreted negatively (Poetry Course)	X	X		

Table 37. Independent Case Report Theme and Research Questions Addressed

RQ1: Do interaction traces affect perception of social presence among co-learners within asynchronous creative writing workshops?

Several themes from the case reports address Research Question 1. Participants in both courses indicated that they formed impressions of their classmates not only through the creative work they posted, but through their peer critique and the frequency and circumstances of the messages they post. Additionally, some participants sought relationships with or chose to follow peers based on the type of feedback they posted to creative work in the courses. For some participants, these comments also served as a historical record of a classmate’s tone in peer critique that could be used to give context to creative work or statements made elsewhere in the discussion board.

Discrepancies in interaction traces also affected participants' perceptions of their peers. When Gwendolyn realized that more people were reading her poem than were providing feedback, she wondered what the problem might be (interview). In cases where interaction traces did not accumulate around a particular posting, participants in the poetry class expressed disappointment and interpreted low rates of response in non-compulsory threads as a lack of caring about the course.

When Marianne was offended by Adrienne's poem, the conflict was quickly resolved through highly emotional and personal sharing from both participants. Beyond merely editing the poem to remove the offensive word as Marianne requested, Adrienne returned to the thread frequently to explain her motivation and her struggle with the poem. She also used subsequent comments to provide personal, cultural, and historical context to the forum for others who encountered the poem (and the record of her discussion with Marianne) later in the week.

Each of these examples provides evidence that the two types of interaction traces present in the course management system, comments and views, had some impact on how participants viewed their peers and formed impressions of them.

Analysis of the survey results also indicated a link between interaction traces and social presence, this time outside of the course environment. Participants who were designated as more sensitive to social presence (as determined by responses on the specific items on the initial survey) reported agreement with statements about commenting on and rating creative work posted to social media sites at a significantly higher degree than the other students.

RQ2: How do learners respond to evidence of interaction and critique as expressed through interaction traces attached to content they have authored? Do their responses change over time?

Themes which emerged from the case reports and cross case analysis also addressed Research Question 2. Participants indicated that they returned more frequently to threads in which they had shared their work, often waiting for particular classmates to post feedback. In several cases, participants formed relationships with other classmates, even contacting them privately, based on the comments they attached to a poem or a story.

A few participants in the workshops posted considerably more messages than were required, primarily in the early weeks of the workshop. Muriel, for example, responded to nearly every one of her classmates in an early thread in the Discussions/Lectures forum, but did not receive a similar response on her own posts. In subsequent threads, she reserved her non-compulsory messages for a few particular classmates.

Analysis of interstitial workshop surveys and the end of semester survey indicated several significant changes in participants' responses to three survey items over the course of the semester. First, participants' responses regarding whether they returned to read others' postings after they had posted their own (items #8/#17) shifted significantly down from the first survey to the second, and then returned to similar levels for the third and final surveys. Furthermore, their reports of whether they read others' postings before they read their own (items #9/#18) significantly dipped for the second survey; significant differences were found between the first and fourth survey as well. Finally, participant reports of whether they felt their classmates had read their messages (items #10/#19) were significantly higher on the fourth survey than they had been on the second. While it is difficult to determine what caused the significantly lower participant responses during

the week of the second survey (which was administered during a week in which some participants might have been engaged in mid-term examinations for other courses), these results do reveal a change in both participant impressions of how their work is read and their own reading practices at different points in the semester.

An analysis of the views received by each message revealed that messages posted later in threads received fewer views, an indication that many participants did not return to threads to ensure that they read every message, apart from the threads in which their own work was being critiqued. Mark, in the fiction course, tended to post his messages at the end of threads and was unsure whether other students bothered to read them.

Changes in social density by week (Figure 23) indicate that the average indicators of social presence in threads shifted throughout the course of the semester. For the fiction course, a high mid-semester plateau in social density mapped very closely to the phase of the course during which participants were engaged in peer critique. In the poetry course, social density was a bit more stable, which may have been accounted for by the longer period of sustained peer critique beginning in week three. Both courses experienced a dip in social density during the weeks in which students were preparing their final revisions. This decrease social density echoes Hara, Bonk, and Angeli's (2000) finding regarding lower levels of social cues in student messages as the semester progressed. Additionally, the initial high levels of social density in the earliest weeks of the class, along with the higher average views-per-post in the Bio Poem thread correspond to Thomas's (2002) observation that students engage in exploratory activity within the discussion board at the beginning of a semester.

RQ3: How do learners' media preferences and online behaviors outside of instructional settings affect their behaviors in online creative writing workshops?

Though this research did not include direct observation of participants' online behaviors outside of the online learning environment, interviews with participants revealed a wide variety of perceptions about classmate activities in the course and out. Some kept all of their interaction within the discussion board, and others reached out to other students through other private channels, expecting that their peers were doing the same thing. In their interviews, Muriel and Joyce, both in the high media preference group, indicated that they had communicated privately with classmates via email.

Based on their responses to media preference items in the incoming survey, participants were assigned to groups reflecting the degree to which they engaged with media online. There were several statistically differences among the responses to social presence survey items by participants in these groups. Participants belonging to the group featuring higher usage of online media reported being able to form distinct impressions of other users both through social media websites (incoming survey item #12) and in the course discussion forum (incoming survey item #15) at a significantly higher degree than their counterparts in the lower media usage group. Additionally, in the end-of-semester survey, the high media preference group reported stronger agreement with the statement that most others in the course had read their discussion postings than the low media presence group (item #19).

These survey results suggest that participants who engage with a greater variety of media activities and who used more online communication tools might have been more sensitive to the behaviors of others, and perhaps more willing to construct the identities of others based on interaction traces.

RQ 4: Do learners represent their own social presence through interaction traces in online creative writing workshops?

Several of the themes discovered in the case reports and cross case analysis address Research Question 4. Peer critique was often mediated and softened by social presence indicators including humor, inclusivity, and self-disclosure. This suggests that participants felt it was important to project their personalities into their responses, in order that they would not offend or be misunderstood. Gwendolyn indicated that an additional intent of her peer critiques was to be perceived as “a nice person” (interview). The examples of the role social presence in resolving the conflict between Marianne and Adrienne in the poetry workshop and in creating confusion between Mark and the instructor in the fiction workshop are additional evidence of the ease with which participants projected their personalities into the creative writing workshops. There was also evidence that some participants felt their peers projected too much of their personalities into the workshop. Joyce and Toni, for example felt that their time was wasted by students who shared irrelevant information in the fiction course. Rourke and Anderson (2002) found that highly affective communication from some students in an online discussion can serve to demotivate others, and this may have been at play with some participants in this study. Rather than engage with a student who bothered her, Joyce reported that she just thanked the student and moved on to interact with others.

The frequent weak references made to previous peer critiques within a workshop thread also represent social presence on the part of the creative writers—though indirect, these interactive references to other messages were used to bolster criticisms and to avoid redundancy.

The content analysis and social density comparisons also present evidence that creative writers enact their social presence through interaction traces. Particularly in the

workshop and exercise threads, where the bulk of creative work was posted in each class, indications of social presence were frequent, especially at the beginning of the semester.

LIMITATIONS OF THE STUDY, REVISITED

This research was conducted in within two novel instructional environments—creative writing workshops with fewer than 20 students each. Study participants comprised only half of the students involved in each class. Many online courses are intended to serve much larger groups of students, and the content of those courses is often much more structured and much less personal or emotional. For these reasons, the behaviors and responses reported in the quantitative findings and the case reports do not represent online learners as a whole—they are descriptive only of these two online courses, which limits the degree to which they can be generalized to other courses and environments.

Beyond the analysis of word counts and posting frequency, the researcher did not consider the final work product of the students (i.e., the revised portfolios of poems or the revised short stories) and did not access the students' final grades in the course. The degree to which students incorporated peer feedback into their revised work was not formally assessed. Additionally, performance in the class was not linked to survey responses, interviews, or the content analysis of discussion board messages. This prevents the research from addressing the degree to which participants' perceptions and behaviors with regard to interaction traces might affect performance in the course.

It is also important to mention that the interaction traces in this study were limited to views and comments. In the discussion of interaction traces in the opening chapter of this dissertation, these two particular types of interaction traces fall on opposite ends of

the spectrum: comments represent persistent evidence of direct interaction with content by an identifiable user; views represent aggregate information about content that has been passively viewed by unnamed others in the class. Inclusion of additional types of interaction traces (tags, favorites, ratings) may have affected the way students responded to and perceived each other's work in the courses had they been present. The results of this study specifically provide information only regarding these two types of interaction traces. However, in the interviews and surveys, participants' responses revealed instances where other types of interaction traces may have been welcome and helpful. The following sections will consider the introduction and use of other types of interaction traces in the course environment both in creative writing workshops and more widely in other online classes.

INTERACTION TRACES AND THE COMMUNITY OF INQUIRY FRAMEWORK

This research study examined interaction traces within the Community of Inquiry framework, particularly focusing on the dimension of social presence. Garrison, Anderson, and Archer, however, present social presence as only one of three types of presence that converge to create a Community of Inquiry. The other two kinds of presence—teaching presence and cognitive presence—were also represented in the fiction and poetry courses, through both the instructor and the participants' interactions. In this section, each of the three types of presence will be discussed and related to the interaction traces examined in this research.

Social Presence

Garrison, Anderson, and Archer defined social presence as “the ability of participants in the Community of Inquiry to project their personal characteristics into the community, thereby presenting themselves to the other participants as ‘real people’” (2001, p. 89). It is this particular aspect of the framework that was directly examined in content analysis portion of this study. That analysis revealed that participants in both courses frequently displayed social presence in its three forms (affective, cohesive, and interactive) in their comments on the discussion board.

Some participants, in their interview and survey responses, also revealed that the number of times their poems or stories had been read—without any indication of who read them or how they felt about the work—gave them a sense of the others in the class, their habits, and the degree to which they were engaged in the course.

Participants projected their own social presence into the course through the comments they made in the discussion board, but also incorporated the activity of others as represented in the course management system into the impressions they formed of their classmates. Some course participants displayed a strong sense of social presence in the initial survey for this study, and it was those participants who indicated that they felt most others in the class read their messages at significantly higher levels than the other participants. This group also indicated at significantly higher rates that they posted more than was required.

The instructor may have served as a model for students’ social presence, as her approach to instruction, critique, and even the configuration of the course environment was involved high levels of inclusivity, humor, self-disclosure, and embracing of others.

Teaching Presence

Within the Community of Inquiry framework, teaching presence is defined as the degree to which the instructor's role is projected into the online course environment, consisting of the instructional management, direct instruction, and building of understanding in the instructional environment (Garrison, Anderson, and Archer, 1999). Within the online writing workshops, the instructors' teaching presence was expressed in a number of ways: the courses' initial configurations and settings (the forums and content areas), the documents she shared (syllabi, workshop guidelines), and perhaps most actively, in her critical interactions with students in the exercises and workshop threads. As was discussed in the case reports, in each of these arenas, the instructor's treatment of expectations for the course, community standards for critique, and use of the online course environment was mediated by high levels of social presence.

Taking the instructor's lead, participants in both courses displayed teaching presence in the form of direct instruction through their responses to the creative work of their peers, and, for the advanced students, in their lecture assignments. In the case of the peer critiques, social presence also played a major role in how they addressed one another. In the poetry course, critical peer responses involved a high level of affective social presence indicators, specifically of the "complimenting and appreciating" and "expression of emotion" categories, while the fiction class participants featured more interactive indicators with a higher level of "asking questions," "vocatives," and "phatics/salutations" in their peer critiques.

Cognitive Presence

Cognitive presence in Community of Inquiry framework is defined as "the extent to which the participants in any particular configuration of a community of inquiry are

able to construct meaning through sustained communication” (Garrison, Anderson, and Archer, 1999, p. 89). This element of the model is most closely tied to course content. Opportunities for participants to express their cognitive presence existed in both the fiction and poetry courses. The exercises in the fiction workshop, in which participants attempted to adapt, rewrite, and experiment with their work using a variety of methods, provided the clearest evidence of cognitive presence of any forum. Students grappled with translating their prose into different points-of-view and storytelling approaches based on course readings. It was in these threads that they received initial feedback from the instructor. In the poetry course, which did not include exercises beyond the initial biographical poem exercise, the discussion questions presented students with the opportunity to work through the lessons they took from course readings with their own work in mind. Within these threads, students discussed which features of a particular poet they sought to embody with their upcoming poems.

Had the process of revision been more public, the threads in which students discussed their choices might have been the location of stronger indicators of cognitive presence. But because each student attended to his or her revisions in private and without sustained public conversation, the differences between the initial drafts and the revised submissions were the only evidence available to participants and the instructor regarding the reflective process of incorporating peer feedback. Within this study, identifying cognitive presence was made more difficult because the researcher did not analyze participants’ creative work and the instructor’s assessment of participants’ performance was not shared with the researcher.

Garrison, Anderson, and Archer’s framework locates successful educational experiences in the overlap of the three forms of presence (Figure 5). Situated in the

overlap between each two types of presence is a function accomplished by the successful interaction of the two. The interaction of social presence and teaching presence results in “Setting Climate,” cognitive presence and social presence form “Supporting Discourse,” and teaching presence and cognitive presence converge on “Selecting Content.” Though this research primarily emphasized social presence, these three functional roles describe very well the position the instructor inhabited.

The instructor’s cultivation of social presence in her every interaction with students seems to have cast the course environment as something very supportive for creative work. In the end-of-semester survey, there was near-unanimous agreement among students that creative writing workshops are well-suited to the online course environment. Russo and Campbell (2004) found that students were more aware of the social presence of the instructor than that of their peers, and this appears have been the case in both the fiction and poetry courses. Participants referred to the instructor’s role in setting the tone of the courses as well as the special status given to her comments on creative work. This is important in light of Shea, et al.’s (2010) conclusion that the instructor’s social presence is more closely related to student social presence than the instructor’s assertion of teaching presence in the course environment. The instructor’s effort and the participants’ willingness to follow her lead appear to have created a successful educational experience as defined by the Community of Inquiry framework.

However, the community, or communities, which formed in these creative writing workshops were represented through groups of direct and indirect participant-to-participant relationships rather than a singular, all-inclusive community. Participants chose others with whom to interact based on the content of their creative work and peer responses, but also based on when and how they happened to interact with the course management system. A larger analysis of the activities and interactions of participants in

these courses reveal a number of areas of course planning and system design that might further enhance online creative writing workshops.

IMPLICATIONS FOR COURSE PLANNING

Results from this research point to opportunities for adjustments to course planning in online creative writing workshops that might stimulate participation and interaction, reduce anxiety, and lead to a more common experience among participants.

Mediating Reading and Writing with Social Presence

In both the fiction and poetry courses, peer criticism often involved emotional appeals to and questions asked of the poet or fiction writer whose work was the subject of the critique. Most often these messages did not receive a response from the poet or fiction writer, except, perhaps, in the form of the revised poem or short stories posted weeks later. Participants noted that it was helpful to know what kind of feedback a particular author sought (Margaret, Survey 4) and most indicated incorporating their peers' feedback into their revisions, but there was no formal channel through which authors presented the rationale or thought process underlying their revision. Assignments in a workshop like those studied might include a compulsory response in which the author of a work being critiqued summarizes the criticism he or she found helpful, responds to questions asked in the thread, and discusses what revisions might be made based on the critiques. In both courses, students made similar claims about their poems and stories in response to the instructor's questions, previewing the choices they would make in their work based on course readings. Engaging students in the same process in the workshop threads might increase the levels of cognitive presence in the discussion board, would

provide feedback to those giving critique, and might resolve questions about the effect a student's feedback had on his or her peers' revised work.

Defining Student Roles in the Workshop Threads

In both courses, interaction among peer critics in a particular poem or short story workshop thread was limited and references among peer critics' messages to one another were rare. When references were made, they did not directly mention the particular ideas of classmates involved. Because more interactivity and dialogue is desired by the instructor, an additional student role in the workshop process could be designed with these specific goals in mind. Much like the "starter-wrapper" technique explored by Hara, Bonk, and Angeli (2000), students could be assigned the role of moderator, or even summarizer (as explored above) who could pose questions and engage with the ideas emerging in criticism as the week progresses. This would allow the works' authors and students who arrive late access to organized summary response to the work. Additionally, this role would provide students with the opportunity to closely consider criticism not attached to their own work and would require that each workshop thread had a sustained presence from someone with a stake in the thread's positive outcome. Such a role would enable in-week shifts in the discussion based on what has or has not been covered and could involve the synthesis of several critical voices as summary at the end of the thread. The summarized peer critiques would be helpful to authors revising their work. If performance in this additional, third role could be included in student assessment, perhaps students would be more likely to visit the course environment more often.

Time Management & Writing Behavior

Figures 10 and 11 reveal that discussion board participation and activity was not evenly distributed throughout each week. Data from the discussion board and interview responses indicated a variety of reading and writing habits—some students responded to all of the work as soon as possible after it was posted, some worked a little bit every day, and some read the work during the week, posting just before the due date. In interviews, participants additionally revealed that the time when messages were posted influenced their impressions of peers and affected whether messages were read or responded to. This unevenness might be mitigated through a different schedule, perhaps staggering the submission of creative work in a manner involving less time spent in a single critique session.

Furthermore, collaborative writing activities might be included to increase cognitive presence among the students. The transactional nature of the author/critic interactions in the discussion board might be loosened if students were encouraged to engage with writing in which they shared ownership with their peers. Chain-story (or “chain poem”) exercises, in which students contribute single sentences or lines to a whole work represent one strategy for this, but technological approaches, such as collaboration through wikis offer other options.

Leveraging Group Identity

In both courses, there were some students who were highly active in the discussion board, posting messages frequently and returning to threads in which further participation was not mandatory. Furthermore, participants in both courses formed close relationships with individual peers through comments to messages, paid special attention to certain peers, and even engaged in private communication with other members of the

workshop. Because communities in these workshops emerged in the form of many one-to-one relationships rather than a cohesive whole involving every student, attempts to leverage the strength of these smaller, closer relationships might provide a more manageable experience for students. The instructor's choice to split the students in the poetry course into two alternating groups begins to approach this idea, but as students were arbitrarily designated as one group or the other, little emphasis was placed on the development of close bonds with other group members. A plan that allows for students to be grouped with other students with whom they have formed relationships, or in whose work they are particularly interested, might offer opportunities for closer reading and deeper understanding of one another's work.

These shifts in course planning might enable a more consistent experience for students in the creative writing workshops and may provide a clearer representation of how their interaction in the course is perceived and used by their peers.

IMPLICATIONS FOR ONLINE COURSE ENVIRONMENT DESIGN

Results from this research study also suggest some implications for the design of course management systems which support creative writing workshops.

Increased channels for awareness

The current course management supplies workshop participants with little information about what others in the class are doing. Some participants paid attention to the number of views that accumulated on messages, or the time at which a participant's message was posted, but locating new threads and monitoring the activities of others demanded deliberate action. Furthermore, posts in forums featuring non-compulsory

threads often went ignored, and in some cases, messages intended for a specific participant or the instructor were not noticed for several days or weeks. If the course management system could be designed to include features that increase awareness of particular events—mentions of students by name, for example, or direct replies to messages—less effort would be required on the part of participants to stay informed. Furthermore, such features could be used to direct students to content that has been overlooked, in effect promoting timely or “unpopular” content, such as requests for assistance which require attention and response.

The instructor used weekly email messages to “nudge” students back into the course environment. Notifications and alerts of mentions and replies could fill a similar role—prompting students to access the course environment. As has become customary in many social media and social networking websites, the course management system could alert students when they are mentioned, or when their message receives a reply or is viewed by a certain number of others. Additionally, within the course management system, information about such interactions might be presented to students in a manner that guides them to the events and activities of their peers in which they are interested. In her interview, Gwendolyn indicated that she wished the course management system had allowed her to receive messages on her smart phone, rather than forcing her to log in to check whether or not something had happened: “I wouldn’t want notifications for everything anyone does, but maybe for the teacher’s postings. Not every time, but if you could set it up” for certain events (interview).

Foregrounding References and Passive Interactions

Some participants were unaware whether their messages had been read by their classmates unless they received direct replies. Due to the reading and writing habits of some participants, it was often unclear that reading activity was taking place over the course of the week rather than on the days that experienced the most posting activity. Furthermore, in their responses to one another's work, participants in both workshops made weak references to other messages they read, quite often without making clear the specific message or participant to which they referred.

If reading behavior were expressed with more information, beyond just a report of total views a post receives, perhaps students would have a greater awareness of their peers' engagement in the class. Indications of whom has read a message, and when, might drive students to interact and could add a more synchronous quality to the workshop. Figures 10 and 11 reveal that many students accessed the course on a similar schedule, though this co-presence is not visible to students other than in the times and dates of messages they post. Awareness of others using the system or working with a particular poem or story simultaneously might expand the dialogue among course participants.

The fact that some students chose to read the creative work throughout the week and post their responses at a different time did not go unnoticed by participants. Gwendolyn in particular expressed anxiety about the fact that her poems were clearly being read, but that she was not receiving feedback. If the system were to allow students to indicate interaction or response to a particular message at a lower threshold of effort—a "like" or a favorite, perhaps, students would receive some information about their peers' response before they have formally submitted their critique. A similar method

might be employed to address the weak references made by students in their critiques, allowing students to register agreement with particular peer critiques, whether or not they read them before they posted their own. The poet or short story writer would then receive information with which they could weight critical ideas, and students' indications of support for a particular criticism would be made more clear.

The course management system already features a rating tool in which participants can assign one-to-five stars to posts, but the instructor chooses to disable this feature in her courses because she believes it to be distracting due to its emphasis on "quality". An appropriate tool for representing this more passive interaction in the creative writing workshops would require a metaphor which did not emphasize a scale of relative quality among postings.

A feature which serves this purpose might also allow students to easily return to particular postings from earlier in the semester when they are in the process of revising their work, rather than reading back through complete threads as some participants in this study did.

Following Peers

Participants in both classes indicated that they developed an interest in certain other participants through their creative work and the manner in which they responded to the creative work posted by others. In some cases, participants interacted directly with these classmates—either publicly in the discussion board or through email or other tools—and in other cases, they merely paid special attention to the classmate's postings. Following an individual classmate's posting activity in the course management system

demanded deliberate attention, requiring a user to click through threads and messages to identify new postings for which the person they are following is listed as an author.

A feature allowing participants to subscribe to all messages by a classmate, or which presents summary information about the activities of another user with whom they had interacted, might ease the process of forming peer relationships in the course. Furthermore, attention to a single classmate's contributions helped participants to develop an impression of the different members of the course. If a classmate's postings could be grouped and read together, this process of forming identities might be simplified. This is an option for instructors in the current configuration of the course management system, but the feature is not enabled for student users of the system. At minimum, such summary information might be provided to students regarding their own behavior to provide them with a sense of how much they have posted and to assist them in managing their workload over the course of the semester.

De-identified interaction traces

In the examples above, suggestions for changes to the course management system in support of creative writing workshops embraced an increase awareness of identity. However, there are some instances in which de-identified information might be useful.

Conflicts and disagreements were present among students in both courses. In the case of the poetry class, Marianne was offended by a poem and felt comfortable enough to address her discomfort directly in the thread. In the fiction class, Joyce merely ignored a student she felt was attacking her, rather than engage her directly. Though the instructor monitored threads in the workshop forum to make sure students maintain a respectful tone, she must first encounter a message in order to assess its tone—in the case of the

conflict between Marianne and Adrienne, the conflict had been settled, and the poem changed, before the instructor had seen it. Not all conflicts can be settled so easily, and not every offended student will be as willing as Marianne was to share her feelings. As conflicts arise in the workshops it might be useful for students to have an anonymous means for flagging a posting as offensive or abusive.

An increased emphasis on interaction traces in the course management system may offer opportunities to directly address many of the themes and issues that emerged in the two creative writing workshops studied in this research.

FUTURE WORK

This work was focused on the impacts and effects of interaction traces in two specific but similar environments. The findings describe the activities of creative writers in online workshop environments, but future work in this vein could take a number of directions. First, within such environments, a wider variety of interaction traces could be introduced and studied, and additional attention could be given to how other aspects of the Community of Inquiry framework might be represented within them. Furthermore, consideration of participant performance could be increased through deep analysis of revised work for evidence of when and where peer critique led to distinct changes in students' creative decisions.

Subsequent studies might focus more closely on the media preferences and internet behaviors of participants outside of the course management system, employing synchronous ethnographic methods for collecting data and revealing a clearer picture of activities that are not represented within the course management system.

Extending research on interaction traces outside of the realm of online creative writing workshops and into some of the more traditionally studied types of online classes would offer further exploration of interaction traces and the Community of Inquiry framework.

Finally, similar research might be conducted within online communities of creative writers more advanced in their writing careers, online academic writing and collaborative research environments, and other online writing environments in which participation is less structured, may extend beyond a single semester's length, and is driven by different goals than were present in these undergraduate courses.

CONCLUSION

This research explored students' use and perception of interaction traces within two online creative writing workshops, a fiction course and a poetry course. Informed by the Community of Inquiry framework, the researcher investigated participants' social presence, interaction, and participation in the course using quantitative and qualitative methods. Case studies for each class were constructed from descriptive analysis of activity in the course management system, analysis of survey responses, content analysis of the course discussion board transcripts, observation of participant activity in the course environment, and interviews with participants and the course instructor.

Participants in both courses displayed high levels of social presence in their activities, and some indicated that interaction information provided by comments in the discussion board, the number of times particular messages were viewed, and the frequency which with their peers participated affected their impressions of others in the class. Additionally, criticism provided by participants in their responses to the creative

work of their classmates was rich with indications of social presence. Participants projected their personalities and personal histories in their responses to one another in order to create relationships, to soften or bolster their criticism, and to resolve conflict.

Participants engaged in a variety of reading and writing practices which shaped their impressions of others in the workshops and led them experience one another's work in inconsistent ways. Several participants interacted with other students through channels outside the course management system, using email and social networks to communicate directly with one another. These types of participant-to-participant relationships were common in both courses. Workshop participants paid special attention to the activities of particular classmates based on the content of their creative work and peer responses or simply due to the patterns according to which they accessed the course environment.

Results of this study suggest that interaction traces did affect the participants' perception of social presence in the online creative writing workshops. Additionally, participants actively projected themselves into the discussion forum for a variety of reasons. Participants were particularly active and interested in the threads in which their own work was the subject of critique. They were less engaged with their peers' responses to others' work—in fact, some participants intentionally avoided peers' responses before writing their own, in order to not be unduly influenced. Many participants did read the responses of others, but did tend only to directly engage with the author whose work was the subject of critique. Media preferences and outside-of-class online behaviors were related to participants' reports of their ability to form distinct impressions of other students in the workshops and in their beliefs about whether or not the majority of students read the comments they posted.

Participant activity in the course appeared to be heavily influenced by the instructor's displays of teaching presence and social presence, which frequently included

emotional expression, humor, self-disclosure, inclusivity, and indications that she embraced the groups of students. The teaching presence reflected in the instructor's design of the course and tone in the course materials, along with the social presence she modeled and engaged participants in, and the cognitive presence evident in interactions among students and the instructor in exercises and peer critiques comprised the necessary dimensions of a Community of Inquiry.

Based on patterns of activity and events in both courses, however, future online creative writing workshops might be strengthened by changes in course planning and course management system design which emphasize and introduce more types of interaction traces to enhance social presence. Future work in this area could explore a wider array of interaction traces and investigate their effects on participant performance in creative writing workshops and other online writing environments.

Appendix A: Incoming Student Survey

1. Indicate course section:

21x /40x

2. My gender is:

Female/Male/Prefer not to answer

3. My age group is:

Under 17

18 - 25

26 - 35

36 - 45

46 - 55

56 – 65

66 – 75

over 75

4. How many online courses have you taken?

This is my first online class

I have taken two online classes

I have taken three online classes

I have taken four online classes

I have taken five or more online classes.

5. Generally, how often do you use the Internet (via computer, phone, or other device)?

Several times a day

Once a day

Several times a week

Once a week

Less than once a week

6. Do you have access to the Internet from your home?

Yes/No

7. Do you access to the Internet from your workplace?

Yes/No

8. Please indicate the communications tools you use regularly:

Instant Messaging

Email

Discussion Forums

Text Messaging

Video chatting

Other (please specify)

Please rate your agreement with the following statements on the following scale:

Strongly Disagree – Disagree – Neutral – Agree – Strongly Agree – Don't Know

9. I consider my computer/internet to be about average.

10. I use one or more social networking websites (like Facebook, MySpace, LinkedIn, MeetUp.com, Classmates.com) regularly.

11. I use one or more social media websites (like YouTube.com, Flickr, Picasa, Twitter, Blogger, LiveJournal) regularly.

12. I often post my own writings, photos, videos, or other creative work on social media sites.
13. I often write comments on writings, photos, videos, or other creative work posted by others on social media sites.
14. I often tag writings, photos, videos, or other creative work posted by others with descriptive keywords on social media sites.
15. I often provide ratings (in the form of 1-5 stars, for example) for writings, photos, videos, or other creative work posted by others on social media sites.
16. I pay attention to the activities of others social media sites.
17. I pay attention to the popularity of videos, images, or other media on social media websites.
18. Online or web-based communication is an excellent medium for social interaction.
19. I am able to form distinct impressions of other users through their activities on social media sites.
20. I prefer to print materials out rather than read them on the screen.
21. Getting to know other course participants gave me a sense of belonging in the course.
22. I was able to form distinct impressions of some course participants.
23. I felt comfortable conversing through the online course.
24. I felt comfortable participating in the course discussions.
25. I felt comfortable interacting with other course participants.
26. I felt comfortable disagreeing with other course participants while still maintaining a sense of trust.
27. I felt that my point of view was acknowledged by other course participants.

28. Online discussions help me to develop a sense of collaboration.

Appendix B: Interstitial Surveys

Indicate course section: 21x /40x

I posted my creative work for feedback this week.

Yes / No

Please rate your agreement with the following statements on the following scale:

Strongly Disagree – Disagree – Neutral – Agree – Strongly Agree – Don't Know

1. I posted more than was required.
2. I was able to form distinct impressions of some course participants.
3. I felt comfortable participating in the course discussions.
4. I felt comfortable interacting with other course participants.
5. I felt comfortable disagreeing with other course participants while still maintaining a sense of trust.
6. I felt that my point of view was acknowledged by other course participants.
7. I read others' postings before I posted my own.
8. I read others' posting after I posted my own.
9. I read most of the postings in the session.
10. Most of the others in the class read my postings.

Please describe a meaningful comment you read in the discussion board this week. How was it helpful?

Appendix C: End-of-course Survey

1. Generally, how often do you use the Internet (via computer, phone, or other device)?

Several times a day

Once a day

Several times a week

Once a week

Less than once a week

Please rate your agreement with the following statements the following scale:

Strongly Disagree – Disagree – Neutral – Agree – Strongly Agree – Don't Know

2. I consider my computer/internet to be about average.
3. I use one or more social networking websites (like Facebook, MySpace, LinkedIn, MeetUp.com, Classmates.com) regularly.
4. I use one or more social media websites (like YouTube.com, Flickr, Picasa, Twitter, Blogger, LiveJournal) regularly.
5. I often post my own writings, photos, videos, or other creative work on social media sites.
6. I often write comments on writings, photos, videos, or other creative work posted by others on social media sites.
7. I often tag writings, photos, videos, or other creative work posted by others with descriptive keywords on social media sites.

8. I often provide ratings (in the form of 1-5 stars, for example) for writings, photos, videos, or other creative work posted by others on social media sites.
9. I pay attention to the activities of others social media sites.
10. I pay attention to the popularity of videos, images, or other media on social media websites.
11. Online or web-based communication is an excellent medium for social interaction.
12. I am able to form distinct impressions of other users through their activities on social media sites.
13. I prefer to print materials out rather than read them on the screen.

Please rate your agreement with the following statements regarding your activity in the online course over the course of the semester the following statements the following scale:

Strongly Disagree – Disagree – Neutral – Agree – Strongly Agree – Don't Know

14. I posted more than was required.
15. I was able to form distinct impressions of some course participants.
16. I read others' postings before I posted my own.
17. I read others' posting after I posted my own.
18. I read most of the postings in the session.
19. Most of the others in the class read my postings.
20. I felt that my writing was critiqued fairly.
21. I incorporated the suggestions of other course participants into my work.
22. Creative writing workshops are well-suited to the online course environment.

Appendix D: Hughes, Ventura, & Dando's (2007) adapted coding template (p. 25).

Category	Indicator	Definition	Criteria	Examples	Keywords
Affective	Expression of emotion	Conventional or unconventional expressions of emotion	Refers directly to an emotion of an emoticon. Use of capitalization only if obviously intended.	"I'm scared" "This is fun" "Sorry this is such a lame email" "Hope you are ok" "I am pleased that..."	Fear, dread, sorry, hope, pleased, love, happy, nervous, anger.
	Use of humor	Joking, teasing, cajoling, irony, understatement, sarcasm	Only code if a clear indication that this is meant to be funny, e.g., extra punctuation or an emoticon.	"I'm useless at computers but will this make me a bad nurse??" "Ha ha" "LOL"	
	Self-disclosure	Expresses vulnerability or feelings	An expression that may indicate an emotional state but does not directly refer to it. Uncertainty, non-comprehension.	"I'm not quite sure how to..." "This is strange" "I don't understand how to..." "I don't know what that means..." "As usual, I am uncertain" "It's all too much" "Website?" "Help!!!"	Help, unsure, strange, difficult, frustration, difficult, confused.
Interactive	Referring to others' messages	Reference to others' posts	Explicit or implicit recognition that another message has been the motivation for this message.	"So what you're saying is..." "I thought that too..." "For me the question meant..."	
	Asking questions	Students ask questions of each other or moderator		"Does anybody know...?"	
	Complimenting, expressing appreciation	Complimenting or showing appreciation of each other or contents of messages		"I like your briefing paper" "it was really good" "Thanks for that"	
	Expressing agreement	Expressing agreement with each other of contents of messages		"I think that would be a good plan" "I think your suggestion is good"	
Cohesive	Vocatives	Addressing or referring to participants by name		"Sally said that..."	
	Expresses group inclusivity	Addresses the group as a possessed or as a whole	Any reference to the group with a possessive pronoun	"We need some ground rules" "The task asks us to..."	We, us, our

	Phatics, salutation	Communication that serves a purely social function		"Hi" "Hey" "Bye for now"	
	Embracing the group	Revealing life outside the group	Any expression that lets the group know about the circumstances of the author	'The kids are asleep right now" "I'm a psychotherapist" "It's raining again" "It's 4am—I'm off to bed"	

Appendix E: Statement of Informed Consent

Title Social presence, interaction, and participation in asynchronous creative writing workshops

Conducted By: James Patrick Williams, under the supervision of Dr. Randolph G. Bias

School of Information, The University of Texas at Austin

Email: jpwms@ischool.utexas.edu

My name is James Patrick Williams, and I am a doctoral student at the School of Information at the University of Texas at Austin. I am inviting you to participate in a research study I am conducting under the supervision of my adviser, Dr. Randolph Bias. This form provides you with information about the study.

Your participation is entirely voluntary. You may ask contact me with questions about your participation at any time. You may refuse to take part in the research or withdraw at any time without penalty. You can stop your participation at any time and your refusal will not impact current or future relationships with University College, Syracuse University, or UT Austin. To do so simply contact me to indicate that you wish to stop participation. Please print or save this consent form for your records. Every participant will receive this form.

The purpose of this study is to explore social interaction among students in online creative writing workshops. Your participation will contribute to a better understanding of how online classes and the software supporting them can be designed to enhance the social experience of creative writing workshops.

Participants in this study will receive a \$25 gift card from Barnes & Noble Booksellers. Your choice to participate or not to participate in this study will have no effect on your grade or academic standing. You must be 18 years of age to participate in this research study.

If you agree to be in this study, we will ask you to do the following things:

Complete two 30-item online questionnaires and four 11-item online surveys over the course of your creative writing workshop.

Grant the researcher permission to access your public postings in the course discussion board for analysis of social interaction and participation.

At the end of the course, participants will have the opportunity to opt-in to a telephone or face-to-face interview with the researcher.

Total estimated time to participate in study is approximately 40 minutes over the course of the semester: 10 minutes each for an incoming questionnaire and end-of-semester questionnaire, and 5 minutes each of for four surveys administered throughout the class. Participants who agree to be interviewed at the end of the summer can expect an extra 30 to 45 minutes of participation time at a later date.

Risks of being in the study

This research may involve risks that are currently unforeseeable. If you wish to discuss the information above or any other risks you may experience, you may contact the researchers listed on this form.

Confidentiality and Privacy Protections:

Only messages posted to the open discussion boards in the class will be analyzed; the researchers will not have access to any private messages, emails, or other communications among students or the instructor.

Any personally identifying information will be removed from all survey and discussion posting data before analysis takes place.

No analysis of this data will take place until after final grades are submitted for the semester.

The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate you with it, or with your participation in any study.

Additionally, no publication or presentation of the results of this research will include any names or other personally identifying information about participants.

The records of this study will be stored securely and kept confidential. Authorized persons from The University of Texas at Austin, members of the UT Institutional Review Board, and your University's Institutional Review Board have the legal right to review your research records and will protect the confidentiality of those records to the extent permitted by law. All publications will exclude any information that will make it possible to identify you as a participant. Throughout the study, the researchers will notify you of new information that may become available and that might affect your decision to remain in the study.

Contacts and Questions:

If you have any questions about the study please contact the researcher. If you have questions later, want additional information, or wish to withdraw your participation call the researchers conducting the study. Their names, phone numbers, and e-mail addresses are at the top of this page.

If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish – the either Institutional Review Board by phone at (512) 471-8871 or email at orsc@uts.cc.utexas.edu

If you would like to obtain information about the research study, have other questions, concerns, complaints or wish to discuss problems about a research study with

someone unaffiliated with the study, please contact the IRB Office at (512) 471-8871 or Jody Jensen, Ph.D., Chair, The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects at (512) 232-2685. Anonymity, if desired, will be protected to the extent possible. As an alternative method of contact, an email may be sent to orsc@uts.cc.utexas.edu or a letter sent to IRB Administrator, P.O. Box 7426, Mail Code A 3200, Austin, TX 78713.

If you consent to participating in this research study, please reply to this email message stating that you would like to participate and I will contact you with information regarding the questionnaires and surveys.

Thank you for your time.

Appendix F: Online Survey Cover Letter

Hello Creative Writer!

My name is Patrick Williams; I'm a librarian at SU and a doctoral student at the University of Texas at Austin. As Sarah mentioned, I am conducting research in online writing workshops this semester. I'd truly appreciate your participation!

Below are the details of my study, but I'd like to point out the following up-front for clarity's sake:

Your participation is completely voluntary and optional.

Each participant will receive a \$25 Barnes & Noble gift card.

Participants will be asked to complete 6 short online surveys—a total of about 40 minutes spread out over the semester.

After the class has ended, I will be analyzing the public postings participants have made to the Blackboard discussion board. I will not have access to any private, person-to-person messages—just what is posted in the forum.

Survey responses will be kept confidential, and any information from the discussion board that could be used to identify participants will be removed prior to my analysis.

If you'd like to participate, please read the details below and click the link at the bottom of the message to access the first survey.

Happy writing,

Patrick

<informed consent form, link to survey>

Appendix G: Coding Information and Template

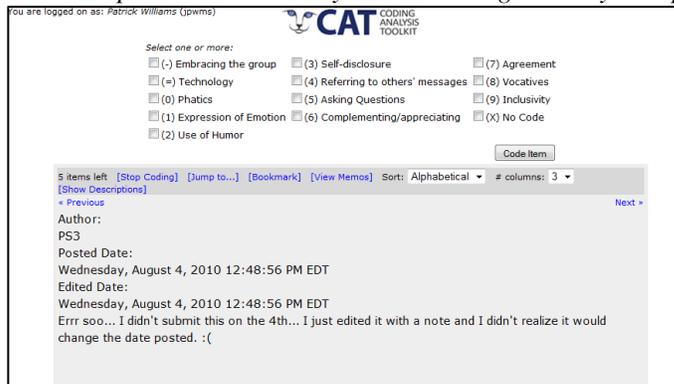
Access the Coding Analysis Tool at: <http://cat.ucsur.pitt.edu/>

Things to remember:

In many cases, the text of a poem or story will appear at the start of a thread; please do not apply codes for material in the text of these*. However, if an author writes a preface or post script, please code that material.

- Please complete a single thread transcript at a time.
- Remember to click “Code Item” to apply codes to each message in the thread.
- For suggested new codes, questions, notes, or explanations, please use the “Bookmark” feature to create a memo.
- If no code is relevant for the current item, please select “No Codes.”

**The Bio poem and Bio story threads being the only exceptions.*



The screenshot shows the CAT Coding Analysis Toolkit interface. At the top, it says "You are logged on as: Patrick Williams (jpwms)". Below that is the CAT logo and "CODING ANALYSIS TOOLKIT". There is a section titled "Select one or more:" with a grid of checkboxes and code numbers: (-) Embracing the group, (3) Self-disclosure, (7) Agreement, (=) Technology, (4) Referring to others' messages, (8) Vocatives, (0) Phatics, (5) Asking Questions, (9) Inclusivity, (1) Expression of Emotion, (6) Complementing/appreciating, (X) No Code, and (2) Use of Humor. A "Code Item" button is visible. Below the code list, there are navigation links: "5 items left", "[Stop Coding]", "[Jump to...]", "[Bookmark]", "[View Memos]", "Sort: Alphabetical", and "# columns: 3". There are also "Previous" and "Next" links. The main content area shows a message from "Author: PS3" posted on "Wednesday, August 4, 2010 12:48:56 PM EDT". The message text is: "Errr soo... I didn't submit this on the 4th... I just edited it with a note and I didn't realize it would change the date posted. :(".

What you're coding:

Complete discussion board activity for one Online Poetry Workshop (58 threads, 309 messages, 7000 words) and Online Fiction Workshop (32 threads, 221 messages, 4500 words).

If you have questions, please give me a call at 313-0201 or email me at

jpwms@ischool.utexas.edu. The bookmarks feature in the coding analysis tool allows for shared memos among all coders. Please complete the coding by May 25th. At that time, you will receive \$200 for your time.

Code	Definition	Criteria	Examples	Notes & Keywords
Expression of emotion	Conventional or unconventional expressions of emotion	Refers directly to an emotion or an emoticon. Use of ALL CAPS only if obviously intended.	"I'm scared" "This is fun" "Sorry this is such a lame email" "Hope you are ok" "I am pleased that..."	Fear, dread, sorry, hope, pleased, love, happy, nervous, anger. Also, indications of emotional response to a poem or story.
Use of humor	Joking, teasing, cajoling, irony, understatements, sarcasm	Only code if a clear indication that this is meant to be funny, e.g., extra punctuation or an emoticon.	"I'm useless at computers but will this make me a bad nurse??" "Ha ha" "LOL" "I HATE THIS!!!"	Just kidding, it would be funny if, references to jokes or characters from popular culture, self-deprecating statements.
Self-disclosure	Expresses vulnerability or feelings	An expression that may indicate an emotional state but does not directly refer to it. Uncertainty, non-comprehension.	"I'm not quite sure how to..." "This is strange" "I don't understand how to..." "I don't know what that means..." "Help!!!" "I was offended by that"	Help, unsure, strange, difficult, frustration, difficult, confused.
Referring to others' messages	Reference to others' posts	Explicit or implicit recognition that another message has been the motivation for this message.	"So what you're saying is..." "I thought that too..." "For me the question meant..."	<i>For Workshop posts, please only code references to messages OTHER THAN the post originating the thread, where the poem or short story is posted.</i>
Asking questions	Students ask questions of each other or moderator	Generally ? will indicate this, but make sure it's a question <i>posed to someone</i> .	"Does anybody know...?" "What are we supposed to do?" "Did you try X?"	Questions about how to do thing, requests for attention to specific portions of a work, request for clarity.
Complimenting, expressing appreciation	Complimenting or showing appreciation of each other or contents of messages	Both thanks for feedback and appreciation of original work.	"I like your story" "Great work" "Thanks for that"	Compliments to a writer's style as well as their ideas.
Expressing agreement	Expressing agreement with each other or contents of messages	General or specific statements of agreement or acknowledgement of the soundness of criticism.	"You're right, I should change X" "I agree with the others that the story's ending is unrealistic"	Also look for "I changed this part because of your critique," "thanks to John's observation" or other instances where an author indicates agreement with criticism by making changes to their work.
Vocatives	Addressing or referring to participants by name	Addressing a message or signing a message with a name	"Sally said that..." "Dear Ronald"	Names have been removed from these transcripts; in their place you'll find the following abbreviations: FS# for Fiction Students & PS# for Poetry Students. Instructor appears where the instructor's name was used. NP appears where a non-participant student's name was used.
Expresses group inclusivity	Addresses the group as a possessed or as a whole	Any reference to the group with a possessive pronoun or term	"We're getting good at this" "Greetings Fellow Poets!" "These revisions are our best work"	We, us, our, the group, collective terms of endearment
Phatics, salutation	Communication that serves a purely social function	Anything that mimics face to face interaction or politeness that is not specific to the post.	"Hi" "Hey" "Bye for now" "Sincerely" "Happy Halloween" "Have a great weekend"	Conventions of telephone calls, letters, or emails.
Embracing the group	Revealing life outside the group	Any expression that lets the group know about the circumstances of the author	"The kids are asleep right now" "I took my family there before" "I've been busy at work this week" "It's 4am—I'm off to bed"	Except for the case of the biographical poems and stories, do not assume that the author's creative work is "about" them.
Technology	The LMS software becomes part of the discussion	Dealing with tech issues: Blackboard, cutting & pasting, posting glitches	"I couldn't find the thread" "I think Blackboard ate my post" "Sorry for the double post" "I'm bad with computers"	Any mention of websites outside of the learning management system, links to them, how they are similar or different.
No Codes				

Appendix H: Poetry Class Syllabus

Syllabus for Poetry Workshop (Online)

Instructor:

Email:

Texts: Available at Bookstore and online:

Required Texts: The Norton Anthology of Contemporary Poetry; 3rd edition; 0-393-97792-7; eds. Ramazani, Ellman, O'Clair

The writer is one who, embarking upon a task, does not know what to do. —

Donald Barthelme

My Philosophical Take on Poetry

In this class you will learn that poetry is an art, a skill, and a linguistic form of magic. A poem takes on an emotion, an idea, a story or an argument, an event or a landscape, a political situation, or a psychological state (or all of the above) and tries to marry the sense (or nonsense) of content with the sound of song. Think of a poem like a translation. It translates something that is in our mind, into an experience for a reader so they can feel or think like that experience.

Poetry is a mirror which makes beautiful that which is distorted. ~Percy Shelley, *A Defence of Poetry*, 1821

Like any art, poetry has technique and craft. This is difficult for us to understand at first, because poetry uses words, and we all use words, so why can't we just blurt out a poem and be done with it? But a painter uses brushstrokes and composition techniques, a pianist learns how to hold his hands in the proper manner and, a poem has rhythm, rhyme, sound, image, metaphor, repetition, lineation, structure, etc. etc. and these are some of the ways we try to create an emotional and artistic experience for a reader.

To write poetry, you must read poetry. So in this class you will workshop your poems, but also you must read and analyze poems. T. S. Eliot said that minor poets borrow while great poets steal. From classical antiquity to the present, poets have always learned their trade by imitating other poets. They have always pursued their individual talent by absorbing, assimilating and in some cases subverting the lessons of the traditions they inherit. In this class, we will read and imitate five poets: Elizabeth Bishop, Louise Gluck, Robert Hayden, Seamus Heaney and Philip Larkin. We'll examine each poet closely, sympathetically, and predatorily. That is, we'll read like aspiring writers, looking for what we can steal. We'll attend to each poet's stylistic and formal idiosyncrasies, their techniques and habits, and then write poems that show whom we've read and how well we've read them.

215 vs. 402

You are either enrolled in the sophomore workshop or the senior workshop. 402 has additional work. Students in 402 will write one lecture analyzing a poem of their choice. 402 students are also expected to write longer peer critiques than the 200 level students—200 words vs. 100 words.

Requirements for 215

1. Imitations of the poets we'll be reading and revisions. 50%
2. Analysis of the poets we will be imitating 20%
3. Critiques of your classmates' poems (minimum 100 words) 30%

Requirements for 402

1. Imitations of the poets we'll be reading and revisions. 50%
2. Analysis of the poets we will be imitating 10%
3. Critiques of your classmates' poems (minimum 200 words) 30%
4. Short lecture posted analyzing one poem and its prosody. 10 %

This was a Poet—It is That

Distills amazing sense

From ordinary Meanings—

---Emily Dickinson

Poems

Depending on the size of the class I will probably divide the class into two groups—one group posts one week, while the other group posts the next. **POEMS ARE DUE THE MONDAY THEY ARE TO BE WORKSHOPPED!** That way

we'll have enough time to comment on them during the week. Please post on time as a courtesy for the rest of the class. If people are consistently late I reserve the right to not accept a poem for that week. Remember, bring in a poem that you want to hear comments on, not something that you feel is finished.

Based on some of the comments you will revise your poems and turn them in at the end of the semester. You will find some comments more helpful than others, but typically something will ring true. Use these comments in your revisions.

Note: Please remember to proofread before you post. You can either post them directly to the forum, or you can attach as a Word file. Formatting is quite important in poetry so make sure your formatting isn't lost.

Presentation

For those of you taking the 400 level of this class, you will need to post a lecture/discussion one week on a poem we've read that you've felt particularly intrigued by. Approximately 2-3 pages long.

The greatest thing by far is to be a master of metaphor. It is the one thing that cannot be learned from others; and it is also a sign of genius, since a good metaphor implies an intuitive perception of the similarity in dissimilars.

--Aristotle

Workshop Comments

Workshop is designed to give you a first audience for your work-in-progress. In the best workshop environment the participants are respectful of each other's work and thoughtful in their comments. Comments are not uniformly negative or positive but include both the strengths and weaknesses of a particular work. Comments should be at least 100 words long for the 200-level students and 200 words for the 400-level. You must post comments on every poem that isn't yours every week. I am not kidding. Comments are extremely important so please repeat after me, I will post comments on everyone's poems every week.

Do you have to post comments on people's poems?

Why yes.

Duende comes from the very soles of the feet.

--Lorca

Open Discussion

I will create a discussion area for people's comments, pleas for help, questions about writing, discussions about writing etc. It is not mandatory to write anything here—rather it is an open area for anything you want to write, concerns, etc. Sometimes people post work here that is outside the class (e.g. a poem inspired by some event).

Online Requirements

You **MUST** have a working computer or access to a working computer, and decent Internet access. If you don't have this then an online class is not for you. If you find you are having trouble with your connection or computer then it is your responsibility to find an alternative computer to participate in the class. Also communication with your professor (me!) is important. Please let me know what is going on—don't just disappear and reappear.

Poets aren't very useful

Because they aren't consumeful

or very produceful.

~Ogden Nash

Blackboard

Blackboard can sometimes be finicky and a pain. When you post work please make sure that 1) it is actually posted 2) that it is correctly formatted 3) that you can open any attachments. Most people cannot open .wps documents. Please find a conversion program if your work is in this format. For those of you using the new version of Word, please post in the .doc format, not the .docx format. All of this is your responsibility! Any work that I can't see, I can't give you credit for! Certain browsers argue with Blackboard. For example, my browser, Safari, can cause Blackboard to fail to post anything. Internet Explorer crashes occasionally. Firefox works fairly well and Netscape isn't bad. Experiment a little in the beginning so that you don't lose work later on. One very good idea is to write responses, exercises etc. in Word and save them. Then copy and paste

over to Blackboard. This way if Blackboard goes wonky you don't have to redo your work.

Email

You must check your email regularly. I have whatever email you gave the University, and this is how I will communicate with you. You may email me any time—I'm pretty good about getting back fairly quickly, although there are occasions when it might take me a little longer.

Use all the clichés possible, such as “He had a gleam in his eye,” or Her teeth were white as pearls.”

--Langston Hughes from “How to be a Bad Writer (In Ten Easy Lessons)”

Timing

In an effort to keep things relatively organized I try to run this class on a weekly basis—that is, I'll put up the assignments up on Monday and you have the rest of the week—that is, until Sunday--to do whatever it is that I have assigned.

The only exception to this is when you post your workshop poems. Workshop poems are due Monday (the same day I put up the assignments), this gives everyone the rest of the week to comment on them. Comments are due by Sunday.

I've posted the tentative schedule below. Subject to the whims of the instructor.

Week	Assignment	Due
August 31	Poem Bio Read syllabus Get book Prosody	Poem bio due Sunday September 5
September 6	Read Bishop poems	Discussion due Sunday September 12
September 13	Workshop on Bishop imitations Group A	Comments due by Sunday September 19
September 20	Workshop on Bishop imitations Group B	Comments due by Sunday September 26
September 27	Larkin	Discussion due Sunday October 3
October 4	Workshop on Larkin imitations Group A	Comments due by Sunday October 10
October 11	Workshop on Larkin imitations Group B	Comments due by Sunday October 17
October 18	Robert Hayden	Discussion due Sunday October 24
October 25	Workshop on Hayden imitations Group A	Comments due by Sunday October 31
November 1	Workshop on Hayden imitations Group B	Comments due by Sunday November 6
November 8	Seamus Heaney	Discussion due Sunday November 14
November 15	Workshop on Heaney imitations Group A	Comments due by Sunday November 21
November 22	THANKSGIVING	EAT TURKEY OR TOFURKY!
November 29	Workshop on Heaney imitations Group B	Comments due by Sunday December
December 6	Revision Week	Revisions due December 10

Appendix I: Fiction Class Syllabus

Syllabus

Fiction Workshop

Instructor:

Email:

Textbook: The Story and its Writer: An Introduction to Short Fiction
by Ann Charters

Publisher: Bedford/St. Martin's; 8th edition

0-312-64511-2

**The writer is one who, embarking upon a task, does not know what to do. — Donald
Barthelme**

**I find that most people know what a story is until they sit down to write one. -
Flannery O'Connor**

As you can see from the quotes above, writing a story is not as easy as it might first appear. In this course you will each write a short story, but we will also look at how published writers have solved some of the problems of character, plot and setting, in language that is exciting, precise and significant.

I turn sentences around. That's my life. I write a sentence and then I turn it around. Then I look at it and I turn it around again. Then I have lunch. Then I come back in and write another sentence. Then I have tea and turn the new sentence around. Then I read the

two sentences over and turn them both around. Then I lie down on my sofa and think. Then I get up and throw them out and start from the beginning. — Philip Roth

Writing a story is a Sisyphean task. When we think we are done we are actually just beginning. All great writers revise. Some revise hundreds of times. So in this class you must revise your story. This is a key component of learning to write.

Responsibilities

Here are the three things you must do to do well in this class:

- 1) Read and discuss (in writing) stories from the *The Story and its Writer*
- 2) Do the assigned exercises
- 3) Write one story and give feedback on **ALL** your classmate's stories. And then as a final project you must revise the story you have workshopped.

Here's what all that means in terms of grades and responsibilities:

Read and discuss stories: You must respond in writing to the stories assigned from the textbook. I (or the advanced students) will post discussion questions. Please feel free to comment on other people's comments as well. 20%

Exercises: The exercises are designed to help you begin to think about your story. I would suggest that at the beginning of the semester you decide the story you want to tell. Then use the exercises to help you get a jumpstart on the story.

20%

Workshop: Everyone will post one story to Blackboard. I will assign you a date. We will be workshopping 2 or 3 stories a week. Just as you want feedback for your story, your peers want feedback too! So a large component of the class is posting feedback on stories. You will be required to post on everyone's story. You must write at least 200 words for the 200-level students and 300 for the 400-level students. At the end of the semester you will revise your story based on the feedback you get, your enhanced knowledge of storytelling and your own instincts. Story (workshopped and revised) 30%; Responses to classmate's stories 30%

More on Workshop: Workshop is designed to give you a first audience for your work-in-progress. In the best workshop environment the participants are respectful of each other's work and thoughtful in their comments. Comments are not uniformly negative or positive but include both the strengths and weaknesses of a particular work. You must post comments on everyone's story except your own. Let's see, I have said that three times, now answer this question: do you need to post comments on everyone's story?????

More on Stories: Stories should be 7-15 pages long. You will submit them to the class for workshop on the MONDAY of the week they are due to be workshopped. The class will then read and comment on them during that next week. Remember, bring in a story that you want to hear comments on, not something that you feel is finished.

Based on some of the comments you will revise both stories and turn them in at the end of the semester. You will find some comments more helpful than others, but typically something will ring true. Use these comments to make your revision as good as possible.

Remember, stories should be double spaced, in 12-point font, and without egregious spelling errors. Please remember to proofread before you post. Also, it works best if you can write your stories in Word and then attach them.

Timing

In an effort to keep things relatively organized I try to run this class on a weekly basis—that is, stories and lectures are due Monday, and then everyone has the rest of the week (until the Sunday) to finish the assignments and give feedback on the stories. The only exception to this is if when you are workshopping a story. Those are due on the MONDAY of the week they're due.

ADVANCED STUDENTS!

Advanced students have to do more work. That's why you're advanced. So the two things you have to do that are different than the 200-level students are:

- 1) 300 words for your feedback on people's stories (instead of 200 words)
- 2) You have to write a lecture on a particular aspect of craft, or fiction writer or a particular type of genre in fiction. 2-3 pages.

It is worth mentioning, for future reference, that the creative power which bubbles

so pleasantly in beginning a new book quiets down after a time, and one goes on more steadily. Doubts creep in. Then one becomes resigned. Determination not to give in, and the sense of an impending shape keep one at it more than anything. — Virginia Woolf

Please feel free to ask questions often. I don't know where you are in your fiction writing, but I want you to be further along by the end of this semester. Write and then write some more. Read. Read more. Keep an open mind. Spend time on the craft. Carry the stories in your head. When your work is due, it's due. Any late work is marked down. I will be judging your work on the timely nature in which it is turned in, and the level to which it is polished. The writing you turn in should be quality drafts. I will not accept work that is "off the cuff" or appears to struggle with basic grammatical issues. If you have difficulties with composition, please get help with proofreading prior to turning in your stories. This is not a composition class, but a fiction workshop.

GRADES:

Grades in this class are determined on by the following criteria:

- 1) Your work must be on time.
- 2) You must complete all that is expected of you.
- 3) Your story won't be graded on the first draft (unless you don't turn it in or you turn in something insufficient) but on the revised story.
- 4) Grammar, sentences, etc. count.

More Yada Yada:

All written work in this class must be your own and produced originally for this class. Any quotes or ideas from other writers must be indicated as such. Consciously plagiarized work will receive an F and perhaps academic penalties. Unintentionally plagiarized work will not be graded and must be redone and resubmitted.

If you know of anything that will influence your participation or evaluation of your work in this course, please discuss it with me immediately. I will gladly consider how your situation will fit into our class, but I can't do this if you remain silent. If you need special consideration because of any sort of disability or situation or are having difficulty understanding the concepts of this course, please bring it to my attention. If you come in the last weeks of class, I may be unable or unwilling to rewrite history. So please, communicate early.

While computers save us great amounts of time and make corrections much simpler, they are susceptible to crashing and freezing. Please save your work frequently, always make back up copies, and allow extra time. Printer malfunctions and inoperable disks are not good reasons for missing or late work. Anticipate these problems ahead of time and plan accordingly.

SPECIAL PROBLEMS/ISSUES/OPPORTUNITIES BECAUSE THIS IS AN ONLINE CLASS:

Blackboard

Blackboard can sometimes be finicky and a pain. When you post work please make sure that 1) it is actually posted 2) that it is correctly formatted 3) that you can open any attachments. Most people cannot open .wps documents. Please find a conversion program if your work is in this format. All of this is your responsibility! Any work that I can't see, I can't give you credit for! Certain browsers may be not compatible with Blackboard, although it does seem to be better these days. I typically use Firefox or Safari. Experiment a little in the beginning so that you don't lose work later on. One very good idea is to write responses, exercises etc. in Word and save them. Then copy and paste over to Blackboard. This way if Blackboard goes wonky you don't have to redo your work.

Email

You must check your email regularly. I have whatever email you gave the University, and this is how I will communicate with you. You may email me any time—I'm pretty good about getting back fairly quickly, although there are occasions when I will be out of town and it might take me a little longer.

Open Discussion

Because we're limited to the online environment I create a discussion area for people's comments, pleas for help, questions about writing, discussions about writing etc. It is not mandatory to write anything here—rather it is an open area for anything you want to write, concerns, etc. Sometimes people post work here that is outside the class (e.g. a poem inspired by some event).

The first draft of anything is shit. –Ernest Hemingway

Writing is easy: All you do is sit staring at a blank sheet of paper until drops of blood form on your forehead. — Gene Fowler

Week	Assignment	Due
August 31: Introductions etc.	Read syllabus Obtain book Write Bio-Story Read assigned stories for next week	Story bio due Sunday September 5
September 6	Story/Structure/Plot	Post exercise/discussion by Sunday September 12.
September 13	Character, Voice & Dialogue	Post exercise/discussion by Sunday September 19.
September 20	Point of View	Post exercise/discussion by Sunday September 26.
September 27	Constructing a Scene	Post exercise/discussion by Sunday October 3.
October 4	Workshop	Post stories on Monday October 4. Comments due by October 10.
October 11	Workshop	Post stories on Monday October 11. Comments due by October 17.
October 18	Workshop	Post stories on Monday October 18. Comments due by October 24.
October 25	Workshop	Post stories on Monday October 25. Comments due by October 31.
November 1	Workshop	Post stories on Monday November 1. Comments due by November 7.
November 8	Workshop	Post stories on Monday November 8. Comments due by November 14.
November 15	Workshop	Post stories on Monday November 15. Comments

		due by November 21.
November 22	THANKSGIVING	EAT TURKEY OR TOFURKEY
November 29	Revision Week	Post revised section of story by December 5.
December 6	Final Week!	Final, revised stories due December 10

Appendix J: Instructor Interview Questions

1. How did you keep track of everything that was being written in the class? How do you assess participation?
2. What led you to contact the students weekly via email rather than through the discussion board?
3. Did you pay attention to word counts and content of postings? Did you contact students about their posting activities?
4. How much attention did you pay to the information that accompanied each posting, like the timing of the posts, the time it was posted or revised posted, or the number of views?
5. You tended to post your comments at the end of the week, after others had posted. How often did you visit threads? Did you lurk? Did you contact students based on that?
6. Did you get many responses to your weekly emails? What kinds? Were they different from the types of discussion in the board?
7. How often did students contact you directly?

8. Did students come to you with problems with others?
9. Did you feel like people gave you fair reviews of each other's' work? Did you feel that they were writing just to fill the word quota? Or offering thoughtful criticism?
10. Did you get a sense that students were more or less critical than you would expect them to be face to face?
11. Did you get a sense that most students read the posts of their peers? How?
12. Did you encounter any conflicts or misunderstandings among students in the workshops?
13. The vast majority of text created in the discussion board surrounded the story/poem workshop areas—did you feel like students paid less attention to the lectures and exercises their classmates submitted?
14. Did you get a sense that the levels of interaction changed over the course of the semester?
15. What was your general approach to assessing student performance in the discussion board?

16. In reading the revisions of students' work, did you see evidence that peer critiques were influential?
17. Other than the different requirements, did you see differences among the 200 and 400 level students?
18. Were there places in the class where students seemed to struggle the most?
19. What can you say about the culture of the two classes?
20. The fiction class seemed more outwardly focused, tended to include more links, discussion of outside stuff. Is this typical?
21. There was an incident where a poem that a student voluntarily edited after someone expressed that they were offended. Can you describe that incident to me?
22. How does the way Blackboard works affect how you've designed the class?

Appendix K: Student Interview Questions

A General

1. How would you describe yourself as a writer? How long?
2. Have you ever been a part of other workshops or writing groups?
3. How would you describe other writers in the class?
4. What did you expect to get out of this class?

B Working in the Course

1. Can you describe your process for reading, writing, and critiquing work each week?
2. How did you keep up with all of the text being created in the discussion board?
3. Could you tell whether or not your work was being read by other members of the workshop?
4. Did you jump between threads or check back often with threads you had already read?
5. How often did you return to the threads where your work was posted?

C Relationships with others

1. Do you think you would have been more or less comfortable reading your work in front of the whole group?
2. Were you worried about trusting the others in the class to approach your work fairly?
3. Were there members of the class you felt you knew and trusted? How long was it before you felt like you knew them?
4. Did you feel like people gave you fair reviews of your work? Did you feel that they were writing just to fill the word quota? Or offering thoughtful criticism?
5. Were there some people in the workshop whose opinions you valued more than others?
6. Did you communicate directly with the others in the class either through email, other parts of Blackboard, or any other technologies?
7. Did you feel like you were more or less critical because you were not face to face? How about others?
8. Did you encounter any conflicts or misunderstandings with other students in the workshop?

D Genres in the Class

1. Did you feel differences with the types of material you posted? Lecture? Stories? Exercises?

2. Were there differences between the types of responses you made and the responses of others?
3. Did you feel like your postings in the non-workshop parts of the discussion board got the attention of the other writers?
4. How aware were you of the person whose critique of you were reading?
5. How about the stories? Could you identify a person's voice or activity in the discussion board when you read their story?
6. How much attention did you pay to the information that accompanied each posting, like the timing of the posts, the time it was posted or revised posted, or the number of views?

E Effects on your work

1. How did the comments that you received from your peers affect your revisions?
2. How did Sarah's comments affect your revisions?
3. What did others in the class learn from you?

F Blackboard System and Course Design

1. What was your general impression of the discussion board? Was it easy to use and understand?
2. How did Blackboard compare to the social networking sites you use?
3. Do you have any general feedback about the structure of the course?
4. How about the design of blackboard? How did it contribute or detract from the workshop?
5. What would make it better?
6. How did this differ from other classes you've taken online?

Appendix L: Coder Recruitment Flier

DATA CODERS NEEDED for content analysis project

EARN \$200 ON YOUR OWN TIME

Seeking graduate students in Communication, Education, Composition & Cultural Rhetoric, Information Studies or other Social Sciences to code roughly 500 one- to four-hundred word messages.

Coding will take place in Late April/Early May. Coders will attend a short training session on the SU campus, but the actual coding can take place anywhere.

Estimated time of completion is roughly 10-12 hours, on your own time.

Experience with content analysis & related software preferred. This project will involve use of the online Coding Analysis Tool from the University of Pittsburgh (<http://cat.ucsur.pitt.edu>). Coders will receive payment of \$200 for their time.

Contact **datacodersneeded@hotmail.com**
for more details if you are interested.

Appendix M: Social Density scores by Thread

Social Density Scores by Thread, Poetry Class					
Class / Thread # / Genre			Adjusted Valid Codes	Total Posts	Social Density Score
Poetry					
	1	Discussion	2	1	2.00
	2	Discussion	6	2	3.00
	3	Exercises	29	6	4.83
	4	Exercises	6	1	6.00
	5	Exercises	5	1	5.00
	6	Exercises	7	1	7.00
	7	Miscellaneous	28	4	7.00
	8	Exercises	6	1	6.00
	9	Exercises	5	1	5.00
	10	Exercises	4	1	4.00
	11	Exercises	10	2	5.00
	12	Discussion	83	20	4.15
	13	Miscellaneous	34	6	5.67
	14	Workshop	29	9	3.22
	15	Workshop	36	9	4.00
	16	Workshop	28	7	4.00
	17	Workshop	52	13	4.00
	18	Workshop	27	8	3.38
	19	Workshop	25	8	3.13
	20	Workshop	26	8	3.25
	21	Workshop	44	12	3.67
	22	Miscellaneous	9	1	9.00
	23	Discussion	28	8	3.50
	24	Workshop	9	1	9.00
	25	Discussion	24	11	2.18
	26	Workshop	21	7	3.00
	27	Workshop	37	7	5.29
	28	Miscellaneous	11	2	5.50
	29	Workshop	19	7	2.71
	30	Discussion	4	1	4.00
	31	Workshop	25	6	4.17
	32	Lecture	4	2	2.00
	33	Workshop	24	8	3.00

	34	Workshop	24	6	4.00
	35	Workshop	21	7	3.00
	36	Lecture	4	2	2.00
	37	Workshop	27	7	3.86
	38	Workshop	27	7	3.86
	39	Workshop	55	12	4.58
	40	Workshop	30	7	4.29
	41	Workshop	23	7	3.29
	42	Workshop	25	8	3.13
	43	Discussion	10	2	5.00
	44	Miscellaneous	23	4	5.75
	45	Workshop	31	8	3.88
	46	Discussion	13	6	2.17
	47	Workshop	22	7	3.14
	48	Workshop	28	7	4.00
	49	Workshop	23	7	3.29
	50	Workshop	22	7	3.14
	51	Revision	2	2	1.00
	52	Workshop	32	7	4.57
	53	Revision	15	2	7.50
	54	Revision	5	1	5.00
	55	Revision	8	1	8.00
	56	Revision	8	1	8.00
	57	Revision	2	1	2.00
	58	Revision	2	1	2.00

Social Density Scores by Thread, Fiction Class					
Class / Thread # / Genre			Adjusted Valid Codes	Total Posts	Social Density Score
Fiction					
	1	Exercises	43	14	3.07
	2	Discussion	18	6	3.00
	3	Exercises	117	22	5.32
	4	Discussion	63	9	7.00
	5	Exercises	122	25	4.88
	6	Discussion	23	9	2.56
	7	Exercises	102	22	4.64
	8	Discussion	10	7	1.43
	9	Exercises	16	7	2.29
	10	Workshop	62	12	5.17
	11	Workshop	77	12	6.42
	12	Lectures	6	1	6.00
	13	Lectures	6	1	6.00
	14	Workshop	44	8	5.50
	15	Workshop	44	8	5.50
	16	Workshop	47	7	6.71
	17	Workshop	45	9	5.00
	18	Workshop	68	12	5.67
	19	Lectures	9	3	3.00
	20	Lectures	0	1	0.00
	21	Lectures	6	1	6.00
	22	Discussion	21	7	3.00
	23	Exercises	20	9	2.22
	24	Miscellaneous	12	2	6.00
	25	Revision	2	1	2.00
	26	Revision	2	1	2.00
	27	Revision	2	1	2.00
	28	Revision	5	1	5.00
	29	Revision	2	1	2.00
	30	Revision	1	1	1.00
	31	Revision	3	1	3.00

Appendix N. Fiction Course Workshop Guidelines

The purpose of a workshop is to help you make a better story. In order to do this you let other people read your story and have an opinion/response to your work which feels a lot like handing someone a knife and asking them to take out your liver without anesthetic. And yes, you are paying money for this pleasurable experience.

Does it work? Yes. I've seen really weak stories get better and really good stories get to the almost great stage. Stories are NEVER born completely done on the first pass. Think of your story like a baby, you've given birth to it, and boy is it cute, yes, and we can all agree on that. However can a baby save the world, or entertain the public for more than a few minutes? No, it needs time and maturity to do its job. Your stories need time, influence and guidance in order to grow up to do its job the best it can.

Alternatively, for those of you doing the critiquing, you too need to think of this story as someone's baby and treat it with care and gentleness and don't shake it or drop it on the floor or throw it up in the air. Stories that are manhandled can die too.

Here are some specific ways to approach commenting on someone's baby, oh I mean story:

1) BE SPECIFIC. Do not say things like "I like this story." Or "This story is too long." Point out a particular paragraph, or explain why a character is doing something completely unbelievable. If you feel the story dragging at a point, don't just say, oh it dragged here and there. Say on page 4 the four paragraphs about Millie's cousin's hemorrhoids should be cut.

2) BE FAIR. Offer one strength and point out one weak spot. Every story has possibility, even ones that seem completely implausible in the early drafts. In the

beginning stages of its life, all stories will have weak characters, plot points, language, etc. And on the other hand all stories have moments of wonder and interest. Let the author know about both the beauty and the beast.

3. TONE. This is really hard in an online class. But you're all writers, so double check your tone before you hit the send button. Are you abrupt, or could your comments be interpreted as rude? Soften them, or phrase feedback about weaknesses by giving constructive exercises, asking questions or referring to the stories we have read in class. If you think what you say may be too blunt or direct, then acknowledge this in your feedback or figure out a different way to say it.

4. AUTHORS YOU MUST COMMUNICATE WITH US TOO! But not until the end of the week. Don't comment back, don't explain (unless it's really necessary), don't say, but I meant.... At the end of the week you can thank everyone for their comments and then let us know that Aunt Mildred was actually a transvestite with a prison past. However if you post a story on which it might be especially difficult to handle certain kinds of feedback, let us know in your original post.

Finally if you do feel offended or hurt by any feedback exchanged with your classmates or me, (and so far this hasn't happened, but there's always a first) please let me know right away. We are supposed to be here to help you grow as an artist, and if there's a block to that growth I want to know so I can do my best to change the situation.

Happy Workshopping everyone!

Appendix O. Poetry Course Workshop Guidelines

The purpose of a workshop is to help you become a better poet and make better poetry, whatever that means. This is not as easy as it sounds as everyone has different opinions and aesthetic goals, still, we do the best we can. I know that letting other people read your poems is a lot like handing someone a knife and asking them to take out your liver without anesthetic, but as the doctor says, it's for your own good. And yes, you are paying much money for this pleasurable experience.

Does it work? Yes, I believe it does. I've seen poems that on the first draft are trite or cliched, become moving and original. I've seen poems that just don't make any sense whatsoever, become filled with a kind of interesting sense. I've seen poems that are so abstract they read like technical manual transform into poems that are juicy and passionate. POEMS are RARELY done on the first pass. Poets revise the same poem sometimes 150 times. Think of that. It can take ten years to complete a poem. Workshop can help to speed up that process by giving you access to readers who are reading with fresh eyes, since right after you write a poem your reading of your poem is filled with misinformation like: this is the best/worst poem especially this line--love is lovely as a rose.

Speaking of which, for those of you doing the critiquing, you must approach your job with care and precision and kindness. Too much manhandling and a poem can die on the vine. Sad poem. Sad vine.

Here are some specific ways to approach commenting on someone's germ of a poem:

1) BE SPECIFIC. Do not say things like "I like this poem." Or "This flows." Point out a particular line, or line break, a specific rhythm or a rhyme scheme. If the poem pops you

out of its dream then let the reader know where that happened. If a word feels completely wrong, let the poet know. And sometimes it helps, especially if the poem is a confusing poem, to sum up the poem in a couple of lines. Just tell what you think the poem is about. That way the poet can know how the poem is coming across.

2) BE FAIR. Offer one strength and point out one weak spot. Every poem has possibility, even ones that seem completely impossible. On a first draft we can have both moments of beauty and grace and moments of incredible clunkiness. Let the author know about both the beauty and the beast.

3. TONE. This is really hard in an online class. But you're all writers, so double check your tone before you hit the send button. Are you abrupt, or could your comments be interpreted as rude? Soften them, or phrase feedback about weaknesses by giving constructive exercises, asking questions or referring to the poems we have read in class. If you think what you say may be too blunt or direct, then acknowledge this in your feedback or figure out a different way to say it.

4. AUTHORS YOU CAN COMMUNICATE WITH US TOO! But not until the end of the week. Don't comment back, don't explain (unless it's really necessary), don't say, but I meant.... At the end of the week you can thank everyone for their comments and then let us know that the raven was actually a stand-in for your dead mother's soul, who was a transvestite with a prison past. However if you post a poem on which it might be especially difficult to handle certain kinds of feedback, let us know in your original post.

Finally if you do feel offended or hurt by any feedback exchanged with your classmates or me, (and so far this hasn't happened, but there's always a first) please let me know right away. We are supposed to be here to help you grow as an artist, and if there's a block to that growth I want to know so I can do my best to change the situation.

Happy Workshopping everyone!

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