

Learning Anew: An Exploratory Study about New Online Learners' Perceptions of People Interaction and Learning to Learn in an Online Course

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Abstract: This study looked at how new online learners in the first course in a graduate level online instructional technology certificate program experienced interacting with others in an asynchronous online discussion and learning to learn online. The study followed twelve new online learners throughout the class using email questionnaires and email follow-up questions. Significant themes included difficulties and fears, time factors, and desire for more feedback and smaller groups. Over time, most participants adapted and found benefits in addition to challenges. One-fourth of the participants did not adapt and left the program at the end of the course. Discussion postings were analyzed for type of posting and audience. Postings gradually became more social and fewer were directed primarily to the instructor. Correlational, and predictive analyses provided insights into the importance of computer skills, initial experiences in the course, and quantity of discussion postings.

Introduction

Being a new online learner presents many challenges and opportunities. Frustration and confusion while dealing with new technologies and new ways to learn and communicate are common but many learners also express satisfaction about the independence this method of learning affords them.

CJ, a new online learner in my graduate level asynchronous (non real time) online course *Designing Educational Websites*, describing initial experiences using the asynchronous threaded discussion forum, explained, "... if you say something stupid, it's over pretty quickly. If you write something stupid, there it is, staring at you week after week. ...". CH also described benefits, "If I miss something or need to go back, everything is right there." JL likewise describes challenges and benefits. "The main benefit, asynchronous communication, is also the main limitation. I couldn't participate in this program if it wasn't asynchronous and yet this also leads, in my opinion, to disjointed discussion."

This exploratory study was driven by a desire to better understand the experience of new online learners as they communicate with others in an asynchronous graduate level online course. Student dialog and discussion in a college classroom conveys numerous instructional benefits and are considered to be critical to learning (Nunn, 1996; Ormrod, 2000). In online learning, students are separated by time and/or place, and transactional distance needs to be overcome in order to optimize the learning experience (Moore, 1993). Planned activities like discussion meet a variety of learning needs that would commonly be met in a face-to-face setting and these activities generally use communications technologies to mediate communication among students and between students and the instructor. The anecdotal experience of numerous online course facilitators I have talked with, however, is that some students do not participate in asynchronous online discussions and others participate rarely. Others participate grudgingly, if participation is required and graded.

The experiences of individual students, as they negotiate this new way of learning, communicating, and sharing information, has not been a large part of educational technology research (Hara & Kling, 1999; Saye, 1997), but individual student experiences necessarily affect the efficacy and viability of online courses. Understanding individual student experiences is imperative because students necessarily make individual decisions about the value and suitability of online learning for themselves. Individual student circumstances and needs greatly impact students' perceptions of online learning (Peters, 2000). Instructional designers and course facilitators need to understand student experiences during online courses in order to make better decisions about optimizing instruction in this environment.

The goal of this study was to take a close and personal look at the thoughts and feelings of adults who are new to online learning as they take their first online course. As a long time instructional technology online practitioner and instructor, I am highly motivated to

understand how learners perceive discussion and interaction in an online classroom. The primary research questions at the outset were:

- How do new online learners view online discussions?
- What factors influence participation in online discussion? What makes participation more likely? Less likely?
- Do learners' views and participation change over time, as the course progresses?

What I found in these new online learners' responses went beyond the original scope of these questions. I came to understand how they perceived some of the challenges and opportunities of asynchronous online learning, in general, as well. All of the participants struggled with using a new medium for learning. Most overcame the challenges and found the process to be satisfactory or better. The challenges were insurmountable for a few participants and they chose to not remain in the certificate program after the end of the course.

Conceptual Orientation

Online discussion is a key way of interacting with the instructor and other learners in an asynchronous, instructor-led higher education online classroom. Moore (1989) considers interaction "a defining characteristic of education" (p. 2) and regards it as "vitaly important" (p. 6) in the design of distance education. This means, according to Kearsley and Shneiderman (1998), that students need to be "...meaningfully engaged in learning activities through interaction with others and worthwhile tasks. ... By engaged learning, we mean that all student activities involve active cognitive processes such as creating, problem solving, reasoning, decision-making, and evaluation" (p. 20). This definition holds interaction to

a higher standard than simply clicking on hyperlinks or reading information on the screen. But what shall students interact with in online courses?

The Web is essentially a social medium. "Technologies are social, because they are produced by, facilitate, and shape human interaction. Correspondingly, the Web is a technology with social and technical dimensions and implications" (Falk, 1995, Introduction section). Many researchers assert the need to use instructional strategies that promote social interaction. Social interaction, in fact, has been shown to have clear cognitive and affective benefits. Gunawardena and Zittle (1997) found that social presence contributed to more than 60% of the learners' satisfaction with an online course. Booher and Seiler (1982) showed that learners' avoidance of learner-instructor interaction in a classroom harmed academic achievement. Interaction with others, then, is not merely a nice-to-have adjunct to an essentially internal experience.

In online learning, interaction with people is at a distance and is generally mediated through discussion tools (e.g., threaded-discussion, computer-mediated conferencing, discussion forums). The functionality and ease-of-use of these tools facilitates interaction or makes it more difficult (Hillman, Willis, & Gunawardena, 1994). Other matters may also help or hinder online discussions, including but not limited to course content, instructional strategies, facilitation style, learning preferences, and incentives (grades, promotion, etc.). Interaction with people, although critical to learning, presents many challenges to the learner. Designers, developers, and facilitators of online learning need to understand learners' experiences in order to lessen these difficulties whenever possible. If interaction with people is important and discussion is the primary venue for this interaction, we must understand why learners chose to (and not to) participate, in order to optimize decisions about design and facilitation in online learning environments.

Some of the reasons for negative reactions to online learning (Peters, 2000) include variations in access (a 1999 McMahon, Gardener, Gray and Mulhern study, cited in Peters, 2000, reports that computer access issues account for 50% of the variance in student attitudes toward online learning), computer anxieties, slow Internet connection speeds, time factors (e.g., other commitments, expectations around time commitments for the course, synchronous activities), and desire for personal contact. Students who cannot write well are at a disadvantage in a medium that depends so heavily on the written word.

Student needs and experiences, of course, vary widely and some find learning online to be very satisfactory. In some large university classes, for example, contact with the instructor and interaction with peers is rare and online learning may afford students greater interaction and contact possibilities than face-to-face classes. Students who value autonomy over the need for face-to-face interaction can be quite satisfied with online learning (Roblyer, cited in Peters, 2000). Persistence in distance education is higher when students feel there are clear intrinsic benefits that will accrue to them (Fjortoft, 1996).

Clearly, individual differences and situations impact each person's ability and willingness to overcome the challenges of distance learning. Each new online learner must determine if the benefits of learning this way are greater than the challenges. In some cases, the need to succeed is great (for example, a student who, in order to graduate when expected, can only fit in a required course that is held at a distance) and a student may continue with online learning even if it presents many challenges. In many cases, though, students have other options and if online learning presents too many challenges, they can select options that better meet their individual needs.

Participant Solicitation

This study involved twelve out of the thirty students in two online sections of a graduate level, asynchronous, large public university instructional technology course called "Developing Educational Websites." This course is the first in a four course online certification program called "Designing and Developing Web-based Learning Environments." I decided to study only new online learners because returning online learners had already self-selected this method of learning as acceptable to them and would likely have preconceived notions about online interaction based on their previous online learning experiences.

This course was chosen because, as the first course in the online certificate program, more than half of the learners are generally new to online learning, the technical content presents a fair number of challenges to the learners, past students have been quite reflective of their experiences in learning using technology, and access to the learners and the discussion forum was feasible because I am the instructor for the course. The fact that I am their instructor is to be noted as a potential problem. There was certainly a possibility that learners felt more pressure to participate and did not express the depth of feelings that they might have with a stranger. My experience in teaching this class over the past two years, however, has been that students have been quite open in sharing their negative and positive feelings and opinions (in the discussion forum and in private email). As future developers of instructional websites, they have shown a willingness (which is encouraged by me as part of the learning experience) to openly critique the course and the course processes as an example of online learning.

Students posted a biography in the discussion forum during the first few days of class. Seventeen of these students appeared, from their biography, to be new to online learning. I solicited these seventeen students via email to participate in the study (see Appendix A for

Email Solicitation Letter). Some told me that they weren't new to online learning and a few did not respond. Twelve students responded that they were new to online learning and were willing to participate in the study. These students were emailed an informed consent form (See Appendix B). The form contained the following section on confidentiality and risks.

Although your name will be on your email responses, your name will be changed to an alias in the final report for the purposes of confidentiality, which will be maintained to the best of the researcher's ability throughout the study and in all subsequent publications of the data. The researcher will be evaluating discussion forum contributions that are applicable to this study and will be able to match the identity of discussion forum contributors with the identity of the study participants. In addition, the information (emails and transcripts of phone calls or in-person interviews) gained through this study will be seen by 1-2 other researchers involved with this project. They will have access to raw data (emails and transcripts of phone calls or in-person interviews) but study participants' names will have been changed to aliases so that other researchers will not know the identities of the study participants. The researcher will work diligently to protect your identity, but almost all research involves at least minimal risk to participants; in this study, there is a risk of confidentiality being breached because your name will be initially included on the email responses and the researcher will know your identity during email, phone, and/or in-person interview conversations.

Because the researcher will know the identity of all respondents during email, phone, or in-person conversations, participation may feel uncomfortable. Some participants may worry that participation and/or their responses will affect their grade. Grading for the *Developing Educational Websites* course is largely objective (i.e. students show mastery of specific technical skills), which reduces the potential for impact.

All information will be kept on the researcher's computer. This computer is in the researcher's office and is not used by others, but there is a possibility that others could gain access to the information on this computer.

Data Collection

Participation consisted of responding privately to me, via email, to three email questionnaires (I used the term "email journals" with participants in order to encourage in-depth answers) at the beginning, middle, and end of the study. The course was 10 weeks long and the questionnaires were sent to participants by email in weeks 2, 5, and 10 (See

Appendix for Email Journals 1, 2, and 3). Some of the questions were closed ended and others were open ended. Here are examples of the questions from the three journals:

Closed ended:

- How would you rate your computer skills, in general (please select one)? Low Low Medium Medium Medium High High (Feel free to add an explanation) (journals 1, 2, and 3)
- How would you rate your satisfaction with online learning, in general (please select one)? Low Low Medium Medium Medium High High (Feel free to add an explanation) (journals 1, 2, and 3)
- What effect did the online discussion forum have on your class experience? very negative effect---negative effect---no effect---positive effect---very positive effect Please explain (journal 3)

Open ended:

- What are your current thoughts/feelings about interacting with other people in this class (other learners and/or the instructor) in the discussion forum? (journals 1 and 2)
- What 3 aspects of this course make it more likely that you will interact with other people in this class (other learners and/or the instructor) in the discussion forum? (journal 1)
- What factors (you, other people, the technology, the instructor, the content, other) do you feel most contributed to the answer you listed in #2? Please be as specific as possible.

As students responded, I followed-up via email with additional questions in order to gain more information about the points that they had made. For instance, for journal 1, in response to my question "What are your current thoughts/feelings about interacting with other people in this class (other learners and/or the instructor) in the discussion forum?" JL said that she felt that she needed to be very careful with what she revealed about herself. I asked, in a follow-up email, for information about if she felt a need to be especially careful in this environment versus a face-to-face environment. Questions for the middle and final questionnaires were developed in response to the types of answers received in earlier questionnaires.

I used email questionnaires because they provided a somewhat private way for participants to share their experiences. Although I had considered using phone interviews in addition to email, I became concerned that participants would find it harder to disclose their

real feelings on the phone and that this kind of personal contact might influence the outcome of the study. Closed ended questions were used to assess changes over time (the third research question). Open ended questions were used to prompt reflection on the process (the first and second research questions). I reviewed postings in the discussion area for additional insights, especially for changes in types of postings over time.

Data Analysis

The primary data set used for analysis was the three email journals and follow-up email answers. As I read through each journal, follow-ups, and discussion postings, I looked for themes. It became apparent to me that participants were also describing their experience of learning to learn in this environment in addition to providing insights about online discussion and interaction. I added an additional question to be answered in this study: How do new online learners experience this environment (in general)?

I started with a list of expected general themes (personal issues, other people issues, technology issues, course issues), gained from the literature, and added additional sub-themes as they became apparent. The general codes I began with served as containers for the sub-codes that emerged. In addition, a general code for general asynchronous discussion and online learning issues emerged. The following sub-themes were coded:

Table 1: Themes and Sub-Theme Codes

Themes	Primary Sub-Themes
1. General online learning and /asynch discussion issues	1.1 Lack of immediacy of response/Disjointed nature of discussion 1.2 Need authentic activities to make discussion "real" 1.3 F2F/Visual cues/Written communication vs. spoken/ Hard to connect names with real people 1.4 24/7 / More work/effort than F2F class 1.5 Helpful posts: a solution to problems/others work keeps me on track/feedback/instructor comments 1.6 Collegiality develops over time and with right design 1.7 Benefits of asynchronous discussion and/or online learning
2. Personal	2.1 Self-consciousness/Looking stupid/How I will be perceived/How much to

issues	reveal/Others know so much more than me 2.2 My own efforts make a difference to the discussion and to the course/ You get what you put in/I can do this. 2.3 Feel timid about asking for help or pushing for own needs.
3. Other people issues	3.1 Want comments and feedback from other learners
4. Technology issues	4.1 Difficulty of following the discussion/thread
5. Course issues	5.1 Small groups work desired 5.2 Post to complete assignments/Posting is required

After these themes emerged, I went back through the journals, follow-ups, and discussion postings and excerpted examples of the themes in the text.

Venita Doughty, another doctoral student, helped me evaluate discussion forum postings for type of posting and audience of the postings. This was done in order to understand how students used the discussion forum, and provided additional insights into the second and third research questions.

SPSS software was used to analyze descriptive and inferential statistics. Descriptive statistics provided information about participant age and educational levels, as well as frequencies for the Likert-like questions in each of the journals. Correlations for each of the Likert-like questions were analyzed to see what questions best correlated with personal satisfaction for the last journal, final grade, number of discussion postings, and continuing with the next course. Regression analysis provided insights into which factors best predicted personal satisfaction for the last journal, final grade, and continuing with the next course. Paired dependent t-tests assessed whether there was a significant change in personal satisfaction between journal 1 and journal 3.

Table 2: Likert-like Questions for 3 Email Journals

<p>Journals 1-3</p>	<p>What is the highest level of formal education you have attained high school--some college--undergraduate degree--some graduate work-- masters degree--doctoral degree</p> <p>How would you rate your computer skills, in general? Low--Low Medium—Medium--Medium High--High</p> <p>How would you rate your satisfaction with online learning, in general? Low--Low Medium—Medium—Medium--High</p> <p>Learners can be as satisfied with an online learning course as an in-person course: strongly disagree—disagree—neutral—agree--strongly agree</p> <p>Learners can develop collegial relationships with other learners in an online class: strongly disagree—disagree—neutral—agree--strongly agree</p>
<p>Journal 3 only</p>	<p>How well do you feel that you gained these skills and knowledge? gained very little--gained some--gained expected amount--gained more than expected--gained a lot more than expected</p> <p>What effect did the online discussion forum have on your class experience? very negative effect--negative effect--no effect--positive effect--very positive effect</p>

Results

Study participants were primarily mid career adults, working in K-12, higher education, or corporate training, with advanced degrees (or working on an advanced degree). The mean age was 43 years of age, with a range between 24 and 59 years of age. The mean level of education was master's degree.

Table 3: Highest Level of Education

	Frequency	Percent
undergrad degree	2	16.7
some graduate	3	25.0
Master's ddegree	4	33.3
Ph.D.	2	16.7
Total	11	91.7

Students enroll in the online certificate program because they want to learn to develop instructional websites. Some are enrolled in an instructional technology master's

program in the university and take the certificate program to fill electives. Others come to the program as higher education instructors, trainers, or subject matter experts with a strong desire to use the Web to share information and teach others. Most have a clear professional need for the skills that are developed within the course.

Some students come with a fair amount of technical skills and others bring relatively less. CJ expressed a great deal of confidence with technical skills and explained how "...in every office I have worked in, co-workers ask me technical questions." Likewise, CY said, "I already know much about the Internet, computer software, networking, web servers, databases, etc., and I am also able to pick up on new computer skills very quickly." ML expressed more comfort working on a mainframe than a PC. LM felt she had adequate computer skills until starting the class and seeing that others already knew something about developing websites. The nature of the certificate tends to attract people with an interest and aptitude for technology, but many students expressed technical frustrations during the course. The range of skills needed to build instructional websites is broad, and even those with relatively higher technical skills coming into the program experienced difficulties with the range of skills taught.

Many expressed a great deal of nervousness about learning online and learning these skills from the outset. LM expressed these fears in an initial posting in the discussion forum: "... this whole thing intimidates the heck out of me - and that's not something I experience too often - so have mercy."

Table 4: Self Rating of Computer Skills, Journal 1

	Frequency	Percent
medium	3	25.0
medium high	5	41.7
high	3	25.0

Bios posted in the first week of class showed a wide range of skills, experiences, and professional backgrounds. Pseudonym initials are being used throughout the study in order to maintain participant confidentiality.

Table 5: Participants

CJ	Prior work as a scientist. Now working on technical communications masters. Wants to know more about online learning.
JL	Librarian in state library system. Workplace is beginning to offer online workshops, enrolled to improve design and development skills.
LM	Speech-language pathologist in a university setting. Some experience developing content for an online training using the Web and wants it to be better.
SS	Completing master's degree in technical communications. Decided to add these courses after attending a tech writer's conference which suggested instructional related skills for members of the field. Works part-time at a university helping faculty use technology for teaching.
TZ	Head of support (human resources, housing, media, travel and other) services division for governmental organization. Wants to explore using online learning for orientation and management courses.
JB	Librarian in school system. Maintains school website and would like to make it better for children, teachers, and parents.
AB	Librarian at elementary school. Maintains school website but feels technical skills are too basic and need upgrading.
ML	Technical trainer and curriculum developer for government contractor. Currently teaches software face-to-face and would like to migrate some of it online.
DM	Former English teacher, Ph.D. in language development and learning disabilities. Wants to develop online continuing education.
CY	Editor, certified to teach English. Needs to develop web presence at current job. Immediate goal: design of online orientation program.
AH	Financial services director, would like to migrate in-person training online.
JH	Tutors students and part-time computer specialist in a private school. Doesn't want to do mainstream teaching and is hoping this will launch new career.

In the following sections, I will describe the themes that emerged and provide examples of participant comments that illustrate many of the themes and sub-themes.

Pseudonym initials and the journal number precede excerpted comments.

General online learning and /asynchronous discussion issues

One of the most pervasive themes that emerged in participants' journals, follow-ups, and discussion postings was that communicating through online asynchronous discussion was generally not nearly as compelling as face-to-face discussion. For many, it felt disjointed.

Many participants expressed this much more strongly at the beginning and middle of the course than towards the end.

ML1: There's just not the same sense of seeing a person day in and day out, and of being in the same boat with them.

SS1: ...there's nothing really compelling about going online, reading a message from some other time frame than the current one, waiting for the slow communication section to open and close after you respond, then try to get back into the situation sometime later when there is a new communication back to you. ...you don't form the kind of interest you do with a live professor and live students. A conversation in the flesh in real time has a lot more potential.

Many of the participants, however, came to find communicating this way as acceptable as the course continued.

The three participants who chose not to continue with the certificate program after the course ended, TZ, CY, and AH, expressed strong negative feelings about online discussion, and these feelings continued throughout the course.

CY1: Posting something and waiting for someone to respond does not develop relationships in the same way that discussing in class does. ...I really need the human interaction to feel motivated to participate in these types of activities.

AH: It has been my experience that rarely (if ever) is the instructor, other students and myself in the discussion forum at the same time. This makes having a "conversation" with anyone a drawn out affair. Sure I can post a message and the next time I come back there is a chance that someone has responded, but it takes too long to go back and forth with someone.

The experience of a supervisor in the course may have negatively impacted the experiences of her staff and coworkers (who were also in the course). TZ disliked interacting this way from the beginning and became increasingly discontent. By the middle of the course, her discontent had begun to impact decisions about the value of this medium for her organization. It may also have impacted other members of her organization who had enrolled in the certificate program as well. Others in her work group appeared to become increasingly negative as TZ's opinions about the experience declined.

TZ2: More and more I see technology enhancing the educational experience, but I also am resistant to taking the human interaction element out of our learning experience.

CY2: There is intellectual stimulation involved in these courses that is impossible to simulate on the web.

As the course progressed CY's journals had the same tone and often used much of the same wording as TZ's journals. In the final week of the course, all participants posted a course evaluation in the discussion forum and the other two students from TZ's organization posted very similarly worded postings. As the journals and postings from this group of students became more similar, I began to wonder about the potential impact of one person's experience (especially a supervisor) on the others in the group and the implications for assigning students to groups and sections. None of the four students from her organization (two were in this study) continued with the certificate.

A related theme was how the lack of visual cues made communication difficult. A number of the study participants expressed difficulty with knowing who was who.

JL1: Body language stuff I miss online - faces, they tell so much. ... I still don't know who the heck people are when they post and this drives me a bit crazy.

LM1: I also know someone is going out of town, but I can't remember who as I'm not connecting names/faces.

JL-Discussion Posting: This is where I miss a live classroom. I tend to remember classmates by going, "Oh yeah, John's the guy with the moustache who sits by the window and works for a rural public library. He had a good point, I should talk with him more during the break..."

On the other hand, one participant felt that it was actually easier to know about the people in the course in this medium.

CJ1: Because of the bios [posted in the discussion forum] at the beginning, I feel like I know more about more of the people in my discussion group than I would in a classroom.

Many participants described the challenges of communicating in a written medium.

Spoken communication, for most, conveyed subtle and not so subtle benefits over written.

Some also felt increased anxiety about communicating in this way.

CY1: ...people are much less forgiving of something that is put in writing. ... If I say something dumb in a classroom discussion, I can read people's reactions and body language and clarify or revise my statement if I feel it is necessary. However, if I say something dumb online, most likely others will read it, think "boy that's dumb" and never respond.

JL1: I just keep trying to be gentle with myself as I adjust to this new medium. After all, I spent some 19 years learning in traditional, in-person classrooms where verbal discussion skills were highly valued.

JH1: It's a lot more personal to have someone react to your writing, because usually you get a chance to think about what you are going to write before writing it vs. in a speaking conversation, sometimes junk flies out of your mouth and it's only a minor deal. What you said isn't going to be on the Internet for all to see for the remainder of the class.

JH continued to feel cautious about communicating in writing and it impacted her willingness to provide substantive feedback. She described an incident where she strongly questioned another student's conclusions and began to write out a response but then changed her mind about posting it.

JH3: I feel very uncomfortable critiquing or disagreeing with another student... . If the class was in-person, I could talk one on one with ___ or I would know _____ better to determine how _____ would respond to criticism.

The lack of visual cues in written communication also impacted understanding. ML described her frustration with trying to gauge the intent of some students' postings.

ML1: I really like face-2-face learning, because I can get a feel of the other people in the class. For example, there seem to be two or three *very* pretentious people in my section. That impression comes through in their posts. However, if I could see their facial expressions and body language, I might find that they are *not* pretentious. It is just how they express themselves in the written word. ...

CJ, who throughout the course, found mostly benefits where some of the others found mostly challenges, felt that the lack of visual cues and use of written communication also offered benefits. JL, in reflecting about written communications later in the course, described benefits as well.

CJ1: It might be easier to strike up relationships online, since there are no physical characteristics that may or may not prejudice opinions.

JL3: Perhaps the hardest thing for me to get used to was that *everyone* could see my assignments once they were posted in the discussion area. I was actually a bit uncomfortable with this at first. ... I actually found myself working harder because everyone could see my work.

Many of the study participants felt that learning this way felt like a lot more work than learning in a traditional face-to-face classroom. The commitment felt more like 24/7 rather than a more typical face-to-face class where the commitment was "Tuesdays from 5-9 PM."

Some were worried about the discipline it took to stay connected and get assignments done without the external structure of an actual class meeting.

SS2: [In a face-to-face class] You have a specific time each week that you know you have to invest. It doesn't go on all the time. You don't have to check in constantly to see if you have some feedback you need to respond to. ... Discussions like this take a lot more time.

TZ2: I thought that a course that did not require dedicated class time could fit more easily into my business travel schedule. But, the dependence upon technology makes it harder to do "on the fly." Last week was particularly frustrating for me. My office was being remodeled (so my computer was down) and I had business travel and although I took my laptop, a lot of travel time could not be as effectively used as I have in the past with a textbook. ... Checking a message board several times a day is more difficult than setting aside three hours a week to meet with a class.

Despite the challenges, many of the study participants began to see positive aspects of communicating publicly.

CJ2: I love seeing other students' 'take' on assignments. ... I love seeing what other people are doing. ... It helps me build confidence when I see how I compare with the class, and also gives me ideas for my own work. ... The postings from folks in the class who have more Ed background than I do are really beneficial. ... it puts a lot of the pieces together for me.

CJ3: The unique thing about online classrooms is that you share everything with everybody, just by turning it in. In classrooms, you share voluntarily, or just some assignments, etc. But because we turn in our work to the public area, there it is for all to see. I gained confidence by seeing how others were doing, and how I was doing in comparison.

LM2: In general, the postings that have been most worthwhile are those that have solutions to problems that I might encounter. ... The 2nd type of posting that is valuable to me would be the reflections – again, especially those who have had some struggles and can validate the struggles I've had – or, if I haven't had struggles, then I feel a bit better that I got through a lesson without difficulty.

ML2: I found that having the students discuss their fears/concerns made mine own seem more surmountable.

ML3: My satisfaction with online learning has increased as this course has progressed. I was finally able to settle into a sort of 'rhythm' regarding time spent on the reading and assignments. ... My frustration level as a first time online learner was quite high through most of this course. It has only leveled off these last couple of weeks.

Collegiality and the sense of a shared experience developed over time and under the right circumstances. The right circumstances turned out to be a publicly posted final project and the expectation (assigned and graded) to provide substantive peer feedback on others' projects. Many participants emphasized that this type of authentic activity (rather than

"forced interaction") was just the thing to make them feel connected to others and that more of these types of assignments were needed.

JB3: It's only towards the end of this course when we were critiquing each other's web sites that I found the feedback (both positive and constructive improvements) invaluable. When this occurred, I felt more like a community of learners than disjointed individuals. I don't mind being a disjointed learner, but I do profit personally from reading the viewpoints of other people. It still isn't the same as being in a class in person and interacting freely and seeing facial expressions. But, towards the end of the class, I could see personalities emerging.

DM3: It's only been at the end of this course that I've seen true collegiality emerge. Perhaps requiring peer critiques of assignments throughout the course would foster more collegiality. Until the final project, the discussion forum helped me most in terms of getting questions answered. During the final project, however, it turned into a collegial space, which I found enlightening.

CY, who had become increasingly negative about online discussion, also found the final critiques to be enlightening.

CY3: I did not like the pressure to post comments every week (and read others' comments) when there really wasn't anything worth talking about. However, my impression changed to somewhat of a positive effect after [the final projects] were posted. It was nice to receive comments on my website and review and comment on the websites of my classmates--a very useful learning experience. Too bad a constructive discussion like that could not have taken place earlier in the course!

Personal issues

One of the most consistent and pervasive comments that emerged, especially in the first and second journals and discussion postings at the beginning of the course was self-consciousness and fear of looking stupid to others. Many of the study participants asserted that others knew an awful lot more than they did. These remarks matched and extended the remarks made about the nature of written communications described earlier.

JL1: I find myself being very careful with what I say and how I say it. When we were posting our bios, I was unsure of how much to include. For example, I'm gay and not at all closeted. I'm out to my family, friends, everyone in my workplace and yet I immediately hesitated to include any reference to my partner in my bio." AH also worried about others' perceptions. "I am the type of person who often uses humor to break the ice... Feelings can be hurt or misinterpreted when you are not able to gauge the listeners' response or know how they are likely to react.

Others initially expressed anxiety about everyone else's knowledge and skills compared to theirs.

LM1: I didn't think anyone was a beginner - seemed like everyone had some level of experience with this.

AB1: After reading the biographies, everyone seems so knowledgeable. I don't feel that confident in my responses.

Issues with others

When asked in the second set of journal questions what would make participants more likely to interact in the discussion forum, the most consistent answer was more feedback from other learners.

AH1: I would like to see reactions to comments I make.

JL2: I was pleasantly surprised when classmates ... complimented me on my Web 1 effort in the Project 4 folder. I remember thinking, "Wow, someone besides the instructor actually looked at my assignment." I know when we begin posting our Web 2 efforts, I'll make an extra effort to look at [their] work since they took the time to review mine.

LM2: I'm always looking for the responses – especially to my postings and especially by the instructor.

DM2: I'm more likely to respond if someone asks for a response or if s/he invites comments.

Only one of the participants reflected on the need to give comments and feedback in order to get it.

LM-Private email, mid-course: ...I've decided to try an experiment. You may have noticed that I've responded to several of the postings this week. I know that every time I post something, I watch anxiously for someone to write back (like in the olden days of going to the mailbox after you've sent someone a letter). I always feel a little let down when I don't get responses. So, I'm trying to see what will happen if I comment on the different postings. I'm looking for "turn-taking" here... But, I am starting to get a couple of responses - so, we'll see if I can increase the turn-taking on the site.

Technology Issues

The primary technology related issue was that some participants felt that following conversation in the traded discussion form was confusing, disjointed, and time consuming. Some participants adjusted well to the technology over time but others continued to struggle with it. For those that struggled, the technology augmented the disjointed and time-consuming nature of communication. A few participants expressed a desire to have spell check capabilities added within the discussion software, which corresponds to comments about the anxiety provoking nature of written communications.

CY1: There are so many folders in the discussion area--Projects, Questions--and a separate area for web links. It is rather daunting to explore all of these areas.

LM2: Posting is really relatively easy – the longer the class goes on, the easier it becomes. The technology doesn't seem to interfere...

DM2: I'm not sure the threading works well for me. I have difficulty remembering what I've read (the titles of the postings aren't always memorable).

ML3: I just didn't warm up to this particular discussion forum. I found it awkward to use; it took time to open the post to see if it may or may not contain anything I was interested in reading; I found the vertical presentation vice a horizontal presentation annoying.

Course Issues

A number of participants expressed a desire for working in smaller groups.

Participants wrote that it would be easier and more comfortable to get know people this way and felt that they would feel more connected and less anxious.

JL1: In a small group, I would only be responsible for reading and responding to the instructors' and four other students' thoughts and comments. I *think* I could handle that much better.

CY1: Perhaps some group work would make me more inclined to talk to the other students. If we were assigned a project on which we had to collaborate, I think that the discussion would be more lively and more focused.

ML3: I will allow that certain people just may bond over an online class, but I don't think it would provide a collegial relationship for me. Perhaps, if I were assigned a 'partner' to work with through the course, and we spent a lot of online time together, emails, etc, my thoughts on this might change.

A number of participants chastised me for making participation in the discussion forum such a large part of the course evaluation (it comprised 20% of the final grade). Many said they felt forced to participate. Some said discussion and participation were essentially a waste of their time. They preferred to spend the time in more solitary activities. TZ and AH found little use for the discussion even as the course progressed and neither continued with the certificate program.

TZ1: At this time I am only entering the communication area and posting comments because it is a requirement of the course. I would prefer to read the lesson, read the required readings, complete and post the assignments and post questions if I have them in the communication area.

TZ2: The discussion group in this class seems forced. I think people are just adding their two-three comments per week to get the course credit and reading most of their comments is a waste of time.

AH2: So far I could have learned just as much without having a discussion area. It seems like people post either to fulfill a requirement or with questions for the instructor than they do to get help from each other. ...

AH3: it was easier for me to get my work done than to spend a lot of time trying to connect with other classmates.

JB was particularly negative throughout the course about the need to interact with others (and even seemed to become disgusted about the need to interact with me during the study) but began to see that it might be useful at the end.

JB1: I would rather not spend much time at all in a discussion forum. I want to learn information and not have to spend time discussing things with people. I didn't realize I would have to do as much interaction as I am required to do in this class. It is my least favorite activity and seems useless. ...

JB2: I don't want to interact, but am required to do so.

JB3: It's only towards the end of this course when we were critiquing each other's web sites that I found the feedback (both positive and constructive improvements) invaluable.

Time...

An emerging meta-theme that tied together all the others was the element of time.

Many of the study participants began to see positive aspects of asynchronous discussion and learning as the course progressed. Many saw that challenges were balanced by benefits, and that both challenges and benefits could exist at the same time. A few even described benefits over learning in a face-to-face setting. Some of the challenges (e.g., takes more time) also contained benefits (e.g., more time to digest).

CJ2: I really like the freedom of asynchronous learning. If I miss something or need to go back, everything is right there. I also feel much less stress and pressure than last year, and the only thing that has changed is my class is online.

DM2: In a way I'm more satisfied because I can always work when I want, at my own pace, and without having to be slowed by others' learning needs. That's balanced by my need for face-to-face, collegial, cooperative learning times, which online learning doesn't offer.

JH2: I feel I spend more time thinking about the course material in online classes. ... There is more time to digest and reflect on the information and it's on-going. In the classroom, you talk about one subject one day, another the next—rarely going back to the first. In our on-line discussion forum, there are discussions on many different subjects and different levels at the same time; therefore, a subject you wrote about yesterday may still be discussed the next day. So, you are still thinking about it.

CJ3: I can't say enough about how pleasantly surprised I was with this online learning thing! ... School seems to fit in much better with the rest of my life when I can choose when I am 'in class'. Every class I've taken invariably has some point where the class sort of stalls out, and this class really didn't have that. Online or not, one of the best courses I've taken.

To assess whether participant postings changed over time, we analyzed discussion forum postings for type of posting and audience. This information provided insights about

how participants used the discussion forum as the course progressed. In general, postings increased over time. Social postings and postings to provide information to others in the class went from 16 in Project 1 to in 104 Project 7. At the beginning of the course, many of the posting were targeted towards the instructor. By the end of the course, most of the postings were targeted towards the other students in the course. Clearly, posting type and audience changed over time.

It is also interesting to compare the postings, over time, of those that chose to continue with the certificate program with those who did not continue. The last three rows of Table 7 show the postings for those who chose not to continue. In general, their postings increased over the course, too, but they did not increase nearly as much as the others. There did not appear to be a dramatic change in type or audience over time.

Table 6: Type and Audience for Discussion Postings

	Project 1 postings		Project 4 Postings		Project 7 Postings	
	Type	Audience	Type	Audience	Type	Audience
CJ	PI-2 Total = 2	I-1 L-1	PA-2 SO-1 Total = 3	L-1 U-2	PA-1 SO-8 PI-4 RI-1 Total = 14	I-1 L-12 U-1
JL	PI-1 RI-1 Total = 2	I-1 L-1	PA-1 SO-1 RI-2 Total = 4	I-2 L-2	PA-2 SO-3 PI-3 Total = 8	L-6 U-2
LM	RI-1 Total = 1	I-1	PA-1 SO-1 RI-1 Total = 3	I-1 L-1 U-1	PA-2 SO-1 PI-6 RI-1 Total = 10	I-1 L-7 U-2
SS	PA-2 PI-1 Total = 3	I-2 L-1	AH-1 GH-1 PA-3 RI-1 Total = 6	I-1 L-1 U-4	PA-1 SO-1 PI-6 RI-1 Total = 9	I-1 L-7 U-1
JB	PD-1 RI-2 Total = 3	I-2 U-1	PA-2 RI-2 Total = 4	I = 2 U = 2	AH-1 PA-2 SO-3 PI-5 Total = 11	I-1 L-8 U-2

AB	SO-2 PI-1 RI-1 Total = 4	I-1 L-2 U-1	AH-1 PA-1 RI-2 Total = 4	I-1 U-1	PA-1 SO-8 PI-9 RI-1 Total = 19	I-1 L-17 U-1
ML	SO-1 PD-3 RI-2 Total = 6	I-2 L-2 U-2	PA-2 RI-3 Total = 5	I-3 U-2	PA-2 SO-3 PI-8 PD-1 RI-1 Total = 15	I-1 L-12 U-2
DM	AH-2 SO-4 PD-3 RI-12 Total = 21	I-13 L-7 U-1	AH-4 GH-2 PA-2 SO-2 PI-1 RI-5 Total = 16	I-6 L-6 U-4	AH-1 PA-1 SO-5 PI-14 RI-1 Total = 22	I-2 L-19 U-1
JH	AH-1 PD-1 RI-2 Total = 4	I-2 L-1 U-1	AH-1 GH-1 PA-1 SO-2 PD-1 RI-2 Total = 8	I-2 L-3 U-3	GH-1 PA-2 SO-1 PD-9 Total = 13	L-11 U-2
TZ	PI-3 RI-1 Total = 4	I-1 L-1 U-2	PA-2 RI-1 Total = 3	I-1 U-2	PA-2 SO-2 PI-3 Total = 7	L-5 U-2
CY	PI-3 CS-1 Total = 4	I-1 L-2 U-1	PA-1 PI-2 Total = 3	I-1 U-2	PA-2 SO-3 PI-5 Total = 10	L-8 U-2
AH	RI-1 Total = 1	I-1	RI-1 Total = 1	I-1	PI-2 RI-1 Total = 3	I-1 L-2

<p>Type of Posting:</p> <p>AH: Ask for help GH: Give help PA: Post Assignment SO: Social/support/kudos PI: Provide information for others (not looking for a reply) PD: Promote discussion (looking for a reply) RI: Reply instructor CS: Course suggestions</p>	<p>Audience for Posting:</p> <p>I: Instructor L: Other Learners U: Uncertain</p>
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Statistical analysis on the Likert-like journal questions, performed with SPSS software, provided additional insights. Correlational and linear regression analysis was performed with all of these questions, the course grade, number of discussion postings, and whether participants continued with the certificate program. These analyses showed the following significant correlations and predictive values.

Table 7: Significant Correlations and Predictive Values

Correlated Factors	R	R ²	Significance
Personal satisfaction journal 1 / Personal satisfaction journal 3	.851	.725	.004
Computer skills journal 1 / Continue with the program	.683	.407	.035
Personal satisfaction journal 3 / Continue with the program	.684	.415	.032
Personal satisfaction journal 1 AND Computer skills journal 1 / Personal satisfaction journal 3	.949	.901	.001
Number of total discussion postings / How well obtained skills journal 3	.598	.357	.004

Paired dependent t tests for changes in personal satisfaction between journal 1 and 3 were not significant. There were no significant correlations with grade received in the course.

Discussion

The experiences of the study participants, as reflected in their journals, follow-up questions, and discussion postings, provide many insights about what it felt like to interact with others and learn to learn in this new medium, for this course. Here are some of the insights gained, in terms of the research questions I asked.

How do new online learners view online discussions?

The study participants viewed online discussions in many different ways, sometimes at the same time. They saw many challenges and many benefits. At first, most found the

discussions to be more challenging than beneficial. Many complained about the lack of immediacy and disjointed nature of asynchronous discussion. Quite a few found the lack of visual cues to be disconcerting, even anxiety provoking. This prevented some from participating or participating at more than a surface level. Many of the study participants expressed apprehension about how they would be perceived in written communications. Quite a few expressed nervousness about the fact that written communications were more permanent. Others described difficulty following the threads. Many felt that learning and communicating this way was a lot more work than learning and communicating in a face-to-face class.

It was clear that interacting with others in an asynchronous discussion was neither intuitive nor easy for most of the participants. This is useful information for those who design, develop, or facilitate online learning. We should take into account how frightened new online learners are likely to be. Anything that can be done to lessen fear and have learners be successful early on may be beneficial.

Over time, benefits began to become apparent to many of the participants. Others' postings provided insights and helped keep them on track. Others' problems provided comfort for those also experiencing problems. The final project provided an opportunity for authentic feedback that engaged most of the participants and helped them see the value of interaction. Although I felt, at the outset, that the technical nature of the content did not require more activities like this, I now see that these types of activities must be planned in from the beginning. I believe that helping students connect with each other early and often will be beneficial.

Some participants never connected, even though they saw the value of the final project and the connections that became possible. Perhaps it was too late at that point and

they had already written off the experience. Those participants did not continue with the certificate program. It would be valuable to do additional research to find out how earlier connections with others impacts student perceptions and the rate of persistence.

What factors influence participation in online discussion? What makes participation more likely? Less likely?

The factor that participants said would influence them the most to participate is comments and feedback from others in the course. It is interesting that only one of the participant's reflections included insights about how their actions influenced others. It appears that it may be helpful to assist learners in gaining early "ah-has" about the value of reciprocal interaction.

Many of the participants expressed irritation that participation was required and some said they only participated *because* it was required. It's hard to know whether to require participation. As a result of these comments, in the following course in the certificate program, I have begun to build in participation into the evaluation activities themselves (e.g. reflection activities, feedback activities) rather than having participation be a separate evaluation entity. It may be that the way it comes across was more of a problem than my expectation that they interact.

It became clear that authentic activities provided a better impetus for interaction than simply ordering interaction for the sake of interaction. Number of postings correlated moderately highly with participants assessment of whether they obtained the skills they desired in the course. Use of online discussion can optimize student and course outcomes but must be carefully designed and facilitated.

Do learners' views and participation change over time, as the course progresses?

Participants' views and participation changed a great deal over the ten weeks of the course. Instead of seeing only challenges, they began to see challenges *and* benefits. Postings, in general, increased. Social and informative postings increased dramatically. This occurred across the board but occurred much more for folks who were adapting to the environment. This provides yet another rationale for helping people adapt early, whenever possible.

How do new online learners experience this environment (in general)?

The first research question provides many of the insights for this question as well. This is not necessarily an easy environment for all to adapt to. It takes perseverance, motivation, and a willingness to get past feeling inept and/or anxious. Not all adapt.

The high correlation between personal satisfaction in journal 1 and in journal 3 tells me that if people were satisfied at the beginning, they stayed satisfied until they end. Perhaps this confirms how critical it is that people feel successful early on. It also points to the importance of willingness to deal with uncertainty at the outset.

Saye's (1997) model may be helpful for understanding who adapt and who will not. The model describes a continuum of dispositional tolerances for managing uncertainty and innovation (in dealing with technology for teaching and learning) that appears to apply to the participants in this study. At one of his continuum is the "Accidental Tourist" (AT) and at the other end is the "Voyager" (VG). The Accidental Tourist, inspired by the Anne Tyler book, is "a reluctant traveler whose greatest priority when visiting new places is to avoid the unfamiliar" (p. 13). When using technology for learning, ATs in general desire predictability, control, and structure and use technology only as a means to a desired end. They value traditional schooling methods and prefer a structured, orderly, teacher-centered classroom.

Saye describes the learning process that ATs prefer as "the accumulation of knowledge from authorities in a known, ordered, procedure" (p. 18). People with AT tendencies might eschew the chaos and unpredictability of online discussion. They might prefer a self-paced course. TZ and AH appeared to display AT tendencies.

Voyagers, on the other hand, are "stimulated by the novelty and experimentation that technology and other schooling changes offer" (p. 12). VGs have a high tolerance for uncertainty and experimentation, see learning as an adventure, question traditional methods and procedures, and prefer an open, flexible, playful, and student-centered learning environment. People with VG tendencies might easily adapt to online discussion. CJ, I believe, was likely a good example of a person with VG tendencies.

Most of the participants in the study adapted and continued with the certificate program, even though it was clear that they continued did not all begin with a high tolerance for uncertainty and experimentation. Probably, most of them fell somewhere in the middle of Saye's continuum, and adapted more or less easily.

Conclusions And Opportunities For Further Study

The thoughts and feelings of these participants may not be representative of all online learners but should provide food for thought about the scope of thoughts and feelings of new online learners as they attempt to cope with interacting and learning in this new way. This was an exploratory study and the primary intent was to begin to understand the experiences of new online learners. It greatly helped me understand some of the factors that influence interaction and discussion in this course and persistence in the certificate program. I believe it has relevance to others who teach online but additional research will need to be done to assess relevance with other audiences and content areas. It has certainly influenced my

thinking about the design and facilitation of this course and future online courses that I will teach.

It would be beneficial to replicate this study with different audiences and content. Does it apply as well for undergraduates as for graduate level courses? Training programs and higher education? Technical content as well as other types of content?

One of the primary questions that the study brought up for me was how instructional strategies that lower fear and promote quick success at the outset might affect participation and persistence. I am hoping to do additional studies in this area. It would also be interesting and helpful to learn if different discussion/interaction tools impacted students' experiences with interaction and actual participation. Discourse analysis could provide additional insights into the nature of online discussion.

One question that did not get answered fully was instructor factors that influence online discussion. I expected, since I was the course instructor, that participants would provide relatively less information about what I did than about other areas of the experience. That is exactly what happened although their thoughts about instructor factors is embedded within some of the other factors (e.g., desire for more feedback, course design issues). Additional studies are needed to get more information about the things that instructors do and don't so that influence interaction.

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Appendix A: Email Solicitation Letter

Dear :

In addition to being the instructor for the *Developing Educational Websites* course, I am a Ph.D. student at the University of Colorado, Denver. One of my primary research interests is how and why online learners use collaboration and communication tools in an online classroom.

I am beginning a research study to find out how new online learners perceive and use online discussion tools. This study is part of my doctoral work and is not part of your participation in the *Developing Educational Websites* course. I would love to have your participation in the study because your participation will potentially help designers and developers of online learning (including you and I!) better understand learner perspectives about online discussions.

Participation involves submitting a journal (answers to a few specific questions) via email 3 times during the semester. I expect that this would take about $\frac{1}{4}$ - $\frac{1}{2}$ hour of your time for each journal submission. In addition I will likely follow up on these journals via email or phone calls, which could take another $\frac{1}{2}$ -1 hour or so of your time.

It is important that you realize that 1) Your participation is **not** required for this course and 2) there are **no** repercussions if you do not participate (this will not affect your grade in any way). If you decide to participate, I will be happy to share my findings with you and would love to explore implications for online learning design and facilitation. Specific information you share with me will not be shared with others. The research report and presentations of findings will not use individual names or specific identifiers. (Other class members, if they read the report, may be able to guess that certain information belongs to specific class members as a result of other information you shared in online discussion.)

For this study, I am looking for participants who are new to online learning (i.e., this is their very first instructor-led online course). Please let me know as soon as possible if you can participate. If you agree to participate, I will send you an informed consent form and the initial set of questions I would like you to respond to.

I appreciate your consideration of this request, as I know you are busy! I am hoping that building understanding together will contribute to the success of this medium as a tool for learning.

Regards,

Patti Shank

Appendix B: Informed Consent

Informed Consent Form for the Participation in Online Discussions Research Study

Purpose

You are invited to participate in a research study to explore new online learners' thoughts and feelings about participation in online discussions. The researcher, Patti Shank, wants to assess how new online learners view online discussions and understand the factors that influence participation in online discussion. The results of this study will be used to improve design and facilitation of online courses that utilize asynchronous discussion. This research is being done to assess new online learners' thoughts and feelings, is not part of the *Developing Educational Websites* course, and your participation will have no impact on your final grade in the *Developing Educational Websites* course.

Duration and Procedures

If you agree to participate in this study you will be asked to do the following, during the 10-week *Developing Educational Websites* course:

- Three times during the course (beginning, middle, and end) you will be asked to respond, by email, to some questions about your thoughts and feelings about participation in online discussion in the course you are currently taking. The estimated time commitment for this activity is ½ - 1 hour in total.
- In addition, the researcher will likely follow-up, by email or phone, on the answers to your questions, in order to gain additional or more specific information. The estimated time commitment for follow-up activities is ½ - 1 hour total.

Confidentiality and Risks

Although your name will be on your email responses, your name will be changed to an alias in the final report for the purposes of confidentiality, which will be maintained to the best of the researcher's ability throughout the study and in all subsequent publications of the data. The researcher will be evaluating discussion forum contributions that are applicable to this study and will be able to match the identity of discussion forum contributors with the identity of the study participants. In addition, the information (emails and transcripts of phone calls or in-person interviews) gained through this study will be seen by 1-2 other researchers involved with this project. They will have access to raw data (emails and transcripts of phone calls or in-person interviews) but study participants' names will have been changed to aliases so that other researchers will not know the identities of the study participants. The researcher will work diligently to protect

your identity, but almost all research involves at least minimal risk to participants; in this study, there is a risk of confidentiality being breached because your name will be initially included on the email responses and the researcher will know your identity during email, phone, and/or in-person interview conversations.

Because the researcher will know the identity of all respondents during email, phone, or in-person conversations, participation may feel uncomfortable. Some participants may worry that participation and/or their responses will affect their grade. Grading for the *Developing Educational Websites* course is largely objective (i.e. students show mastery of specific technical skills), which reduces the potential for impact.

All information will be kept on the researcher's computer. This computer is in the researcher's office and is not used by others, but there is a possibility that others could gain access to the information on this computer.

Refusal Rights

Please understand that your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time. If you choose not to participate in this research study, you will not be penalized in any way. If you consent to this research study by signing the form below, you are still free to withdraw your consent and discontinue your participation in the study at any time without prejudice or penalty of any kind.

Copy of Consent Form

A signed copy of this consent form will be provided to you in a timely manner for your records.

Contact Information and Rights

If you have any questions now or in the future regarding this research study, your participation, or how the data will be collected and reported, please do not hesitate to contact the researcher:

Patti Shank
Doctoral Student, School of Education, UCD
Phone: 303-699-9377
Email: patti@learningpeaks.com

If you have any questions concerning your rights as a subject in this research study, please contact:

Office of Academic Affairs
CU-Denver Building, Suite 700

Phone: 303-556-2550

Thank you for your time and consideration.

Signed Consent

I understand the above information and voluntarily consent to participate in the Participation in Online Discussions study.

Print Name _____

Signature _____ Date _____

Appendix C: Email Journals

Email Journal 1

Thanks so much for agreeing to participate in my online discussion study! Participation involves submitting a journal via email 3 times during the semester. I will likely follow up on these journals via email or phone. This email is the prompt for the first journal.

Directions for Journal 1: Please answer the following questions and submit to me via email, no later than 9/6/01. Thanks so much for your time and help! I am hoping that building understanding together will contribute to the success of this medium as a tool for learning. If you have any questions about this study or the journal, please don't hesitate to contact me!

Patti Shank

Online Discussions Journal - #1

Information about you:

- Your name:
- Your email address:
- Best phone number(s) to reach you to follow-up on answers to this email:
- Best times to reach you:
- Your age:
- Your occupation:
- What is the highest level of formal education you have attained (please select only one)? high school, some college, undergraduate degree, some graduate work, masters degree, doctoral degree, other (explain)
- Is this your first online course? Yes No
- Why did you decide to take this course online? Would you rather have taken it in person?

Self assessment and opinions:

- How would you rate your computer skills, in general (please select one)? Low Low Medium Medium High High (Feel free to add an explanation)
- How would you rate your satisfaction with online learning, in general (please select one)? Low Low Medium Medium Medium High High (Feel free to add an explanation)
- Learners can be as satisfied with an online learning course as an in-person course (please select one): strongly disagree disagree neutral agree strongly agree (Feel free to add an explanation)
- Learners can develop collegial relationships with other learners in an online class (please select one): strongly disagree disagree neutral agree strongly agree (Feel free to add an explanation)

Journal Questions:

1. Before starting this course, what were your thoughts/feelings about interacting with other people in this class (other learners and the instructor) in a discussion forum?
2. What are your current thoughts/feelings about interacting with other people in this class (other learners and/or the instructor) in the discussion forum?
3. What 3 aspects of this course make it more likely that you will interact with other people in this class (other learners and/or the instructor) in the discussion forum?
4. What 3 aspects of this course make it less likely that you will interact with other people in this class (other learners and/or the instructor) in the discussion forum?
5. What changes or additions to the course would make you more likely to interact with other people in this class (other learners and/or the instructor) in the discussion forum?

Thanks again for helping!

Patti

Email Journal 2

Hi! It's me again... :-)

Thanks for agreeing to participate in my online discussion study. I have learned a lot so far from your answers and appreciate your willingness to help more than I can say! The information you are providing will be extremely helpful to folks who teach online! I'm looking forward to sharing my report with you.

I know that the fact that I'm the instructor of the EdWeb course might be distracting (you might feel, for instance, that you cannot tell me things that are negative). I assure you that this study and the course have nothing to do with each other and that your candid answers are extraordinarily welcome. I will not learn as much (and the study will be less useful to others) if you feel like you need to hold back.

Thanks again for your time. This is not an easy time for anyone, and I know you are extraordinarily busy. If you have any questions about this study or the journal, please don't hesitate to contact me!

Patti Shank

Directions for Journal 2: Please answer the following questions and submit to me via email, no later than 9/28. Thanks so much for your time and help! I am hoping that building understanding together will contribute to the success of this medium as a tool for learning.

Online Discussions Journal - #2

Information about you:

- Your name:
- Any change in email, ph#, or best times to call since the last journal?

Self assessment and opinions:

- How would you rate your satisfaction with online learning, in general (please select one)? Low Low Medium Medium High High (Feel free to add an explanation)
- Learners can be as satisfied with an online learning course as an in-person course (please select one): strongly disagree disagree neutral agree strongly agree (Feel free to add an explanation)
- Learners can develop collegial relationships with other learners in an online class (please select one): strongly disagree disagree neutral agree strongly agree (Feel free to add an explanation)

Journal Questions:

1. What are your current thoughts/feelings about interacting with other people in this class (other learners and/or the instructor) in the discussion forum? Has anything changed since the beginning of the course?
2. I'm trying to determine what kinds of postings you feel are especially helpful/worthwhile. Can you point me to a few postings that you find to be especially helpful and/or worth your time (Who posted? Folder? Date? Why helpful/worthwhile?)? Are there any postings that you can point me to that are examples of the kind which are non helpful/not worth your time (Who posted? Folder? Date? Why not helpful/not worthwhile?)?
3. What is it about each of the factors below (in green) that makes you more likely to interact (in the discussion area) or less likely to interact (in the discussion area)? For example, are there aspects of the technology which make is easier to interact? Harder? Anything about your personality which makes you more likely or less likely to interact? Anything about the other folks in the class?...

	You	Other people	Technology	Instructor	Content	Other
Makes me want to interact						
Makes me NOT want to interact						

Major thanks, once again.

Patti

Email Journal 3

I'm back!... this is the last of the email journals in my online discussion study. This has been an amazing experience for me as a researcher and I cannot thank you enough for your contribution to my learning as a researcher and about the topic I am studying. The information you have given me has been invaluable. I now hope to make the information you have provided a learning experience for others in the field (including you, if you're interested).

Thanks so much for your time and willingness to help. I know you are extremely busy and that your contribution to this research is truly a gift.

Thanks!

Patti

Directions for Journal 3: Please answer the following questions and submit to me via email, no later than 10/27. Thanks so much for your time and help!

Information about you:

- Your name:
- Any change in email, ph#, or best times to call since the last journal?

Self assessment and opinions:

- How would you rate your satisfaction with online learning, in general (please select one)? How would you rate your satisfaction with online learning, in general (please select one)? low---low medium---medium---medium high---high (Feel free to add an explanation)
- Learners can be as satisfied with an online learning course as an in-person course (please select one): strongly disagree ---disagree--- neutral---agree---strongly agree (Feel free to add an explanation)
- Learners can develop collegial relationships with other learners in an online class (please select one): strongly disagree ---disagree--- neutral---agree---strongly agree (Feel free to add an explanation)

Journal Questions:

1. What were the primary skills and knowledge you hoped to gain from the class?
2. How well do you feel that you gained these skills and knowledge?
gained very little---gained some---gained expected amount---gained more than expected---gained a lot more than expected (Feel free to add an explanation)
3. What factors (you, other people, the technology, the instructor, the content, other) do you feel most contributed to the answer you listed in #2? Please be as specific as possible.
4. What effect did the online discussion forum have on your class experience?
very negative effect---negative effect---no effect---positive effect---very positive effect
Please explain.

5. Based on your experience in this course, will you likely take another online course?
Under similar or different circumstances?
Please explain.

6. What else do you want to tell me about your experience in this course that is important for me to understand but I forgot to ask?

Do you want a copy of the final report when it is done? Should I email it to this address?

May I contact you with follow-up questions for this journal?

yes---no

May I contact you during the next year to ask some additional questions? (Please understand that your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time.)

yes---no

It's not enough to just say thank you... so I'll say THANK YOU!!!

Patti