ONLINE LEARNING IN ART EDUCATION:

IMPLICATIONS FOR POST-SECONDARY ART APPRECIATION PEDAGOGY

by

ROBERT DANIEL QUINN

(Under the Direction of Richard E. Siegesmund)

ABSTRACT

Traditional scenarios of art appreciation at the university level are challenged in this study, which is an investigation of an online distance learning course taught by the researcher. The methodologies of educational criticism and teacher-research were utilized to consider the nature of e-learning events in the hybrid classroom and their implications for teaching art appreciation. Volunteers formed an alternative learning group who participated in the course entirely online, while their classmates continued in the face-to-face classroom. Interactive computer technologies were used to facilitate six synchronous class meetings throughout the semester. The alternative group also participated in ongoing asynchronous class discussions, and its members created two personal works of digital art using computer graphics software applications.

Three major cases are presented to illuminate the nature of online distance learning in this art appreciation course. These cases deal with several students' experiences with the online lecture, two separate groups' encounter during an online chat, and one student's journey through the creation of her personal course webpage. Three facets of e-learning are considered as each case is interpreted: the levels at which the

individual(s) was/were processing information, interaction with fellow practitioners, and electronic pedagogy. Each of these realms of online distance learning provides a clearer picture of the type of learning in which students engaged as they worked through the activities of the alternative learning group.

Six themes emerged throughout the study: the temporal shift in e-learning, the necessity of a more capable peer, the importance of multitasking, the liquidity effect, student disposition, and the events' student-centered tendencies. The implications that each theme holds are discussed in terms of recommendations for practice in online learning in art appreciation. Considerations for pedagogical techniques in traditional post-secondary art appreciation are also examined.

INDEX WORDS: Online distance learning, Interactive computer technologies, Art appreciation, Educational criticism, Teacher-research, WebCT, Horizon Wimba, Adobe Photoshop.

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ROBERT DANIEL QUINN

B.S.Ed., The University of Georgia, 1997

M.Ed., Auburn University Montgomery, 2000

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ROBERT DANIEL QUINN

Major Professor: Richard E. Siegesmund

Committee: Tracie E. Costantino
Carole K. Henry
Janette R. Hill

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
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DEDICATION

For Madison, whose infancy flourished between the hours I spent writing this dissertation. Thank you, my daughter, for providing me with the frequent "playdates" that served as much-needed distractions from the overwhelming data that I had collected in this study in online learning. As I wrote, I thought of the virtual classrooms you might know in your future. May you be blessed in your education, wherever it takes you.

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CHAPTER ONE

Sites of Art Appreciation

There is a long-time association between the subject of art appreciation and the university or college art department (Jones, 1974). Such college courses that center around the teaching of art to non-art majors are direct descendents of Renaissance humanists' attempts to instruct their students about the appreciation of the beauty of the literature, drama, and architecture of the past (Efland, 1990).

In this dissertation, I invite you to enter one such art appreciation classroom. By entering this art appreciation classroom, you will glimpse a teaching and learning environment where this broad subject is approached. Entrance into the art appreciation classroom allows us to consider the many variables that affect teachers and students as they grapple with the subject. Throughout this dissertation, I introduce many of the variables of the teaching and learning environment through stories that illustrate a unique kind of *hybrid* art appreciation classroom: one that is simultaneously traditional and online through synchronous and asynchronous interactive computer technologies (see Appendix A for a glossary of technical terminology).

Three different stories are the basis of this first chapter. The first two stories represent common student experience in the two major branches of art appreciation education. The first, more *traditional* approach to art appreciation, is one that utilizes what some (Kundu & Bain, 2006) superficially refer to as an "art in the dark" approach. This kind of classroom draws on traditional art historical techniques of teaching, particularly the lecture. The teacher typically assumes that all students learn in the same way. Students are required to listen to their teacher as

s/he instructs while taking notes about the transmitted information. Then, in a test, students must recall that information.

The second story in this chapter is an *online* approach to art appreciation that utilizes what might be considered an "art on your own" teaching strategy, as informed by theories of independent study (Moore & Kearsley, 1996) in distance education. This approach typically draws on contemporary techniques of teaching that place much of the burden for student learning on the student. Students are required to read selected texts, view artworks, and respond to them. Sometimes, student responses are individual, in the form of an essay or quiz; at other times, students respond in an online discussion with classmates. A student chooses when and where to conduct most of this "read and discuss" activity. All that a student needs is self-discipline, motivation, and an Internet-enabled computer to succeed in this anytime, anyplace approach to art appreciation.

These two broad categories of art appreciation education form bookends for a vast range of approaches that combine aspects of both traditional and online approaches. Combining the best features of these two approaches may create meaningful learning experiences that encourage students to take charge of their own learning while attending to particular core concepts chosen by the teacher. However, online courses are usually *entirely* online, and traditional courses are solely in the physical classroom.

When teaching a course in both the traditional and online way *at the same time*, the result is a hybrid course. I base the third story in this chapter on my students' experiences in the art appreciation classroom I created in this study. The hybrid course not only combines the techniques of both approaches to art appreciation education; it combines the *means* of teacher-

centered instruction and student-centered construction of knowledge and meaning that are implicit in the "art in the dark" and "art on your own" approaches.

So far, I have discussed each of these three approaches to art appreciation education in general, rather nebulous, terms. To illuminate the ways in which the approaches differ, I present the following stories about the teaching and learning performed in each. The first story provides a fictional portrait of Justin's experience in Dr. Wahl's traditional art appreciation class. Justin is a character based upon my observations of undergraduate students in my art appreciation classes. His response to Dr. Wahl's pedagogy is demonstrative of my encounter with similar classes in my undergraduate coursework. I present this descriptive narrative so that you might participate in an alternative reality that closely mirrors the real world, so that, ultimately, you may be ushered into a new way of seeing (Barone & Eisner, 1997) the art appreciation classroom.

Dr. Wahl's Traditional Art Appreciation Course

It's five past two o'clock in the afternoon. The air is thick and hot, as it is so many days in northeast Georgia during the summer. Justin is late to class. *Man,* he thinks, *you'd figure I'd have this schedule of mine all figured out by the midterm.* He rushes up the big hill from Myers Hall, where his dorm room still reeks from the cologne bath he just took. Since he hit his snooze button eleven times, he didn't have time to shower; although, he did somehow manage to find the time to program his iPod for a 10-minute medley of songs that was sure to shake the sleep from his bones. The music blares from his little white ear buds as he hikes up Jackson Street towards the art building. He blasts through the building's front doors and veers left into a dimly lit gallery space. His art appreciation class meets in a lecture hall just past this gallery space. He's ten minutes late.

As he opens the classroom door, he isn't surprised to find that the lecture hall is as dimly lit as the gallery space he's just traversed. Since the door is at the back of the lecture hall, he knows that Dr. Wahl can see him slinking into the room. Nevertheless, Justin attempts to drift undetected through the shadows, hoping that his chronic tardiness will somehow go unnoticed just this once. He steps down, carefully feeling his way to a seat a couple of rows down. He steps over a few of his classmates, trying desperately not to disturb them, even though they seem to stare through him. Justin plops down and sloughs his canvas messenger bag off his shoulder. In one motion, he plucks the ear buds out of his ears, grabs a pencil and notepad, and silences his cell phone.

His eyes are still trying to focus. At 2:15 in the afternoon, the Georgia sun is extremely bright. And, because he flew in to the classroom like a jet, his eyes didn't have enough time to adjust to the dark. He looks to his left and his right at the faces of those around him, hoping that by focusing on something closer he could accelerate the adjustment period. His classmates' faces are awash in the glow of a warm, undulating light. As his eyes finally begin to adjust, he can notice the lack of expression on their faces. A couple of people, like the guy next to him, have their eyes closed. Justin, too, can feel the weight of his eyelids already. His pupils, now fully dilated, can easily focus on the source of this light emanating from the front of the lecture hall: a gigantic projection of some brightly colored painting. Its colors are particularly vivid in contrast to the vast expanse of darkness that is this cavernous lecture hall.

"This is a painting called *The Joy of Life,*" Dr. Wahl excitedly says (see Fig. 1.1). "It was painted by Henri Matisse in 1905 and 1906."

Fig. 1.1. Henri Matisse, *The Joy of Life*. 1905-1906. Oil on canvas.

This proclamation startles Justin. The surreal glow coming from the front of the room had mesmerized him. He quickly scribbled the information his professor was rattling off about the painting.

"It is an oil painting on canvas," Dr. Wahl continued. "It measures 68 1/2 inches in height by 93 3/4 inches in width." Justin knew that these vital stats were the kinds of things that would be included on the midterm exam tomorrow. He was sure to jot down every detail.

Suddenly, he panics. He realizes that he might have missed some other important information about the test while he was rushing to class moments earlier. He leans across the empty seat to his left to ask somebody else what Dr. Wahl had said earlier.

"Hey man," he says to the kid sitting close to him, "what'd I miss?" The boy seems slightly put off at the question, and barely turns his head toward his questioner as if he were pronouncing judgment upon Justin's lack of punctuality.

"Uhm…I don't know. Not much," he says as he leans forward a little in his chair. His big silver-rimmed glasses are ablaze with a reflection of the Matisse image projected on the screen. The vermillion, lemon yellow, and carnation hues of the painting swirl together and shine forth in double-intensity from the boy's spectacles.

Justin can't help but place his attention on the source of the startling reflection as he looks back to the front of the lecture hall. "Alright. Thanks, man," he musters. He can't believe the kid's insolence.

Justin slithers down in his seat, props his feet up on the seatback in front of him, and breathes a complacent yawn. He was going to try to stay awake and jot down every single piece of information about all of the other slides Dr. Wahl would show the class today. However, his professor's soothing baritone, coupled with the hum of the slide projector, overcomes Justin as he capitulates to much-needed slumber.

Treading a Well-Worn Path

In Dr. Wahl's university classroom, students like Justin are common. An overwhelming majority of undergraduate students would react to this kind of learning environment in the same way. Many of them are operating on very little sleep on any given day. While they will war against letting their fatigue get the best of them in class, they are fighting a losing battle when their class is in a dark room!

An undergraduate student is, after all, riding the roller coaster of culture shock (Pugh, 2005). As an undergraduate adjusts to college life, s/he is constantly experiencing the highs and

lows of integration into an entirely new culture of learning. This shock comes at a price, which students often pay in class. However, in a traditional art appreciation classroom such as the one described, there is a sense that casualties like Justin are a part of the formula. If students cannot adjust to the demands of their college academic load, the course will forge ahead without them.

A course such as art appreciation has a long history of forging ahead in such a manner. Ancestors of the contemporary art appreciation course had become a part of higher education as early as the nineteenth century. Jansen (1991) claims that art appreciation in higher education began in the lectures of Charles Eliot Norton at Harvard University in 1874. In the 130 years since that time, art appreciation has followed closely in its founder's footsteps with an emphasis on lecture-style delivery of a "survey of art" revolving around art historical studies. With a neat and concise presentation of landmark artworks and art movements, a professor surveys the realm of art. Projected slide images accompany those "key" works of art. The classroom is dark to display the slides with clarity; hence, the superficially-titled "art in the dark" approach persists.

The following fictive account provides a contrast with the more traditional art appreciation course. I tell of Roger's experience in Dr. Elser's online course to provide the reader with a narrative portrayal of a second major approach to art appreciation education. Much of the content of this story is derived from my own investigation into the kinds of courses offered online in the early twenty-first century. Although Roger is a constructed figure, his encounter with Dr. Elser's course is based on my own experience as an online learner during my graduate coursework.

Dr. Elser's Online Art Appreciation Course

Roger logs into his art appreciation class's Internet website. He has one chore to do this sunny summer morning: start Module #2. He assumes that Module #2 will be like Module #1, which was an entire online learning opportunity for him to navigate. Module #1, while full of interesting information and learning resources, often felt like a series of hoops through which he had to jump. If Module #2 were similar to Module #1, it would contain a plethora of information, beginning with instructions and online text content, replete with hyperlinked resources from every corner of the World Wide Web. Roger would be required to eventually take several intermediary quizzes, write a 750-word essay response to what he had read, and complete a 50-question multiple-choice exam. Even though there was a great deal of work to do for the module, the three weeks Dr. Elser provided the class to complete it should be an ample amount of time to finish.

Three weeks was the amount of time he had to complete Module #1, and even though it was plenty of time, he felt himself wishing for an additional day or two because he had not paced himself very well. After all, learning on his own like this was something that was completely new for Roger. He was quite accustomed to the traditional, day in and day out, routine of his other college classes. Now that he was taking this online art appreciation class, however, he was still trying to get the hang of his schedule and how he needed to arrange his habits to complete the course activities.

One thing that drew Roger to taking this art appreciation course was the way that he could be "attending" class from the comfort of his own home. *I'm so glad I didn't have to rush out the door to class this morning*, he thought. He sips a cup of coffee while he enters the required information into the password-protected art appreciation course website. He mashes the

buttons on his TV's remote to turn down the volume while he navigates to the part of the website containing Module #2.

What he finds is a lengthy document that provides him with the directions to the sequential activities necessary to complete to successfully finish the module. An essay on Jasper Johns by Leo Steinberg was his first reading. He had purchased a course reading packet containing this essay. He looks for it by fumbling through the stack of textbooks on his desk. He reads a few pages, finding himself increasingly irritated by the complexity of the reading. His eyes slip from the page, move over the computer monitor, up the wall, and out his dormitory window to behold the lush, sunlit quad. Some of the other residents were already outside enjoying the warm summer sun. His thoughts snap back to the task as he grudgingly peers back into the computer screen. Perhaps he would return to the Steinberg essay some other time.

The instructions in Module #2 direct Roger to read an online encyclopedia entry about Jasper Johns. Since the name of the artist was hyperlinked, he immediately clicks on it to find a brief biography of the artist and some small images of his work. He clicks the back button on his Internet browser to return to the art appreciation course website, and reads further in Module #2. He sees that Dr. Elser has written a series of questions designed to, Roger assumes, prompt the students to think about various aspects of the artist's work and the critic's interpretations. The questions probe deeply into some of the more difficult aspects of art and criticism.

After the litany of questions, Dr. Elser seems to take a more instructive turn in her writing for Module #2. She elaborates on three or four different works by Jasper Johns, discussing his method, inspirations, and various academic and technical aspects of the selected pieces of art. Roger finds his head swimming with all of the information he is reading. Most of the reading is also hyperlinked; he will explore those links in greater depth later. He skims the rest of the

information, paying attention to the bits of direction scattered throughout Dr. Elser's commentary. Then, he sees the final major points of the module that he will have three weeks to address: a couple of self-check quizzes, an essay assignment, and an online exam.

Each of these assignments has at least a paragraph of information, including directions, timelines, and deadlines. Roger is overwhelmed with all of the assignments required of him to complete this module. He reminds himself that there is always tomorrow—or the next day, even—at which time he might attempt to tackle the work in Module #2. For now, however, Roger is too distracted by the beautiful June morning that awaits him. He swings himself around in his desk chair, hops up, grabs his keys and student ID, slips on his flip-flops, and flies out the door to greet the day.

Isolation in Independence

The *art on your own* approach to art appreciation, as described through Roger's experience, is a version of online distance learning that has been referred to as *anytime, anyplace* learning (Palloff & Pratt, 2005). Dr. Elser's use of a course website and its endless textual format (e.g., Module #2) to present information is a popular approach to e-learning. However, such modular learning is not a prerequisite of quality e-learning experiences (Phipps & Merisotis, 2000). Even though Dr. Elser's utilization of hyperlinked text begins to open access to the World Wide Web and the enormous amount of information available to students like Roger, the way that Roger processes that information may not be dynamic and intellectually challenging because of the lack of peers' perspectives and ideas.

The static "read and respond" approach of Roger's class differs little from the correspondence courses that were precursors to early twenty-first century online distance learning courses. Roger's online art appreciation course is a technologically advanced

representation of the kind of distance learning that has been a part of higher education since the late 1800s. The most unfortunate aspect of Dr. Elser's course is that it propagates the foundational flaw of independent study. "Not long ago, a provision of increased learner independence in terms of space and time meant a corresponding loss of collaboration and increased isolation" (Garrison & Anderson, 2003, p. 3). We see Roger's independence, paradoxically, in relation to his isolation.

The final story of this chapter is a fictitious account of Daniel's experience in Dr. Peabody's art appreciation class. His encounter with the hybrid course illustrates the ways that both traditional and online approaches were combined to create a unique teaching and learning environment. My impression of the way my own students perceived our hybrid class informs the characterization of Daniel's response to learning in this manner.

Dr. Peabody's Hybrid Art Appreciation Course

Daniel is working in his apartment, as he has for the better part of the afternoon. His online art appreciation class requires long periods of time. It is not that the assignments themselves require an overwhelming amount of time necessary to complete them; rather, he feels inundated with the plethora of learning activities. The windows of the various applications he is currently using fill his computer screen, as the class assignments choke his calendar. Managing them is as challenging to Daniel as is managing the time needed for the class itself.

Sheesh! he thinks, rubbing his hand across his forehead. The clock on the computer read 4:30, which almost made him choke on the swig of water he had just taken. He has been doing three things for a couple of hours, pretty much all at the same time. He's been listening to Dr. Peabody's lecture on chapter two of the textbook, he's been chatting with a small group of his

classmates about course topics, and he's been contributing written discussion messages to the online course website's bulletin board. The first and second of these three activities are combined, and are considerably more complicated than they might seem. An e-learning application called Horizon Wimba integrates these two tasks. Using Horizon Wimba, he can see a PowerPoint presentation, hear his instructor's voice, and participate in a text chat with his peers. While it is easy for Daniel to follow the audio and visual content of Dr. Peabody's lecture, keeping up with the conversation his peers are having is a little tricky.

The third activity, contributing discussion messages, is something that Daniel attends to occasionally as the Horizon Wimba session continues. Leaving the Horizon Wimba window open, he opens a new Internet browser window and navigates to the online course website. The course website is one Dr. Peabody created using WebCT, which is a brand of courseware that provides all of the tools necessary for creating and maintaining a comprehensive online class site. Daniel logs into the VAR 200- Art Appreciation WebCT site using his user ID and password. In the Communication area of the site, Daniel finds the Bulletin Board area. There are several different topics there, yet he is interested in finding the topic for this week. He clicks on the name of the last topic on the list. It is the right one.

He is glad to have found it. His response is due by the end of the week. Now that it is Thursday, he is running out of time to respond. He quickly reads the topic; it was from Jill and Mark, who are the discussion facilitators for this topic. They write:

> Subject Mona Lisa Mania
> Posted by Jill Heilpern on Wednesday, June 16, 2004, 11:19am
>
> Probably the greatest allure in all of art is the mystery which surrounds da Vinci's 'Mona Lisa.' Was da Vinci painting a woman? himself? or another man? What is the deal with her smirky smile? Why do people cherish this piece above and beyond most others? Connoisseurs and scholars alike have argued the answers to these questions for years, yet, they can not seem to agree on the answers.

> We are interested in your opinions on the debate. To get a headstart on formulating your own opinion, please visit the Mona Lisa Mania website: http://www.monalisamania.com
>
> From this website click the 'All About Mona' link. This link will give you all the factual information about the painting. After you have read through this, proceed to the 'Theories' link where you will see a definition of 'theory.' Once you have read through this proceed to the 'scholarly' link that will be on the left side of the page. Read through most or all (they are not very long) and begin thinking about your own opinions.
>
> In your posting, you should tell us what you think of the scholarly interpretations as well as presenting your own theory behind the painting. Remember, there are no right or wrong answers because as far as we know... no one has heard directly from da Vinci himself!
>
> -Jill, Mark
>
> --also, if you have time, post your thoughts on the Mona Lisa Mania website. It shouldn't be required, but it could be fun nonetheless.

Daniel, trying to keep up with the lecture and his classmates' conversation, clicks back and forth to the Horizon Wimba window every few seconds. Still, he feels like he is spending all his time catching up with everything that is happening in the Horizon Wimba session. He would send a text message occasionally during the chat. Yet, he cannot get over the constant nagging feeling that he is missing something. Most of his attention is on the WebCT discussion message that he still needs to formulate.

He devotes himself to the discussion topic for a brief period. The discussion facilitators direct everyone to read a little bit of information about the topic. Since all of this information is available at the Mona Lisa Mania website, Daniel begins exploring it. Afterwards, he reads what some of his classmates wrote in response to the topic. He reads their discussion messages, some of which are very interesting. Their comments on the topic help him decide how he might approach his own response.

To avoid spending additional time away from the Horizon Wimba session, which Daniel has been listening to during his research, he quickly starts his word processing application and begins typing his response to the topic. He likes to create his discussion message in a word processing document so that he has a backup of his work—just in case. Then, he copies the text, clicks on the WebCT window, begins a discussion message of his own, and pastes his response into the space provided. After clicking to post the discussion message, Daniel hurriedly clicks on the Horizon Wimba window.

He feels a sense of satisfaction having completed one of the learning activities for the day, and is able to settle in for the last few minutes of the Horizon Wimba lecture. As Dr. Peabody speaks, he reads his peers' text chat comments. Occasionally, something one of them says prompts him to respond with a text message of his own.

Daniel has been busy with the events of the art appreciation class today. He has worked himself into a knot with all of the activities he was attempting to attend to during the same period. As the lecture ends, he tries to relax. It is a comfort to know that he has finally completed his work on the bulletin board area for the week. With the conclusion of the Horizon Wimba session came the end of the rest of his art appreciation duties for the week, as well. Things will not be too hectic for him, at least in this class, until next Monday. At that point in time, his life will again halt in the time crunch that typically accompanies this form of learning online. The ebb and flow of time in e-learning seems strange to him, still, even after having reached the midterm of the course. He presumes that it is something to which he will never quite grow accustomed.

A Change of Pace

In Daniel's case, the online art appreciation course is one that is full of expectations. There are expectations placed upon him—that he will pay attention to and communicate with his peers. He has expectations of his peers and Dr. Peabody—that they will provide him with thought-provoking and insightful perspectives with which he might process the information he is receiving. There is a great deal happening all at the same time, and there is a lot at stake for his future.

Garrison and Anderson (2003) describe the stakes of Daniel's learning experience in this way: "The qualities that will be valued in a 'knowledge-based future' will be the ability to access and understand information. That is, the ability to order and construct knowledge" (p. 7). The authors go on to discuss the importance, and difficulty, of designing e-learning experiences that provide learners with opportunities to gain expertise in the complex skills and thought habits they will need in later life. Daniel's experience in Dr. Peabody's online art appreciation course appears to have provided him with opportunities to utilize multi-mediated communications. This learning environment gives him practical experience in processing and understanding some of the vast amount of information available to him in the "too much information age." He learns through the perspectives of others as he is engaged in an online community of inquiry.

Striking a Balance in Post-Secondary Art Appreciation Pedagogy

Daniel's e-learning experience has some of the better qualities of both the "art in the dark" and the "art on your own" approaches to art appreciation education described in Justin's and Roger's stories. Each of the two major approaches was used to create the learning experience that served as Daniel's art appreciation course. Balance was struck through an application of e-

learning drawing on both the real-time, or *synchronous*, format of online distance learning and the anytime, anyplace format that is referred to as *asynchronous* e-learning.

Balanced use of both synchronous and asynchronous technologies was maintained according to three primary factors: the kinds of information processing Daniel was required to perform, the pedagogical techniques Dr. Peabody used to teach, and the manner in which Daniel was required to interact with the other students. First, the design of the e-learning event required Daniel to analyze information as he read about the theories regarding da Vinci's *Mona Lisa*. He also had to recall the information Dr. Peabody presented in his lecture while discussing the various topics that were addressed.

There was also a balance in the pedagogical strategies used in the e-learning event described. A teacher-centered approach to instruction by lecturing, the traditional lecture, using as a synchronous e-learning tool. It was also possible for students to construct knowledge collaboratively by their participation in the Horizon Wimba text chat. Additionally, Dr. Peabody provided students with the means to asynchronously discuss a student-generated topic using the WebCT discussion area.

Finally, balance was maintained by making it necessary for students to engage with their peers and teacher in a variety of ways. To have the success that Daniel had in the Horizon Wimba session, he had to coordinate two levels of interaction with others. He focused on his own activity as he listened to Dr. Peabody's lecture and processed the information presented. He also actively participated in a group-centered real-time discussion of the lecture material. His level of practitioner interaction varied again while he responded individually to the WebCT discussion topic in relation to his classmates' posted responses.

The range of outcomes seen in Daniel's experience with the e-learning events of the hybrid art appreciation class is what makes this approach so promising. An online teacher can utilize the unique characteristics of these more balanced e-learning practices. A wide range of student learning objectives can be met by embracing the different pedagogical strategies inherent in the use of this kind of e-learning design.

This dissertation is an elaboration of the teaching and learning performed in a balanced approach to art appreciation education through e-learning. I embrace the challenge issued by Garrison and Anderson (2003) in their assessment of e-learning research: "The challenge is not simply to advocate or promote the use of e-learning. The real challenge and benefit is to understand the nature and potential of e-learning and its implications for how teaching and learning is, and should be, approached" (p. 8).

Preview of Coming Chapters

In Chapter Two, I describe the community of inquiry model of e-learning as the basis for the approach to online art appreciation education that I utilized for this study. Each of this model's constituent considerations are discussed in terms of the conceptual framework through which e-learning is more fully understood. The conceptual framework as a spatial rendering of three axes is introduced: information processing, practitioner interaction, and electronic pedagogy. Chapter Two concludes with an illustration of the way that the conceptual framework is used metaphorically as a map to guide us through the process of understanding what e-learning events look like when post-secondary art appreciation is taught entirely online.

Chapter Three, as a methodological chapter, describes the specific site of inquiry for this study. The foundational emphases of a particular art appreciation course, including its structure,

its participants, and the technological tools used to teach it, are discussed. Reasons for selecting educational criticism and teacher-research as the methodologies for this study are illuminated, and I provide a rationale for choosing my own classroom as the site of inquiry. I also discuss the data gathering methods used, and explain how the data was analyzed in order to attend to each of the four dimensions of educational criticism: description, analysis, interpretation, and thematics.

Chapters Four through Six serve as cases of e-learning events that occurred throughout the study. Each of these cases is investigated by first describing the events through narrative storytelling. In vignettes, my experiences as the teacher are interspersed with those of my students to provide illustrative scenes of the e-learning events. Then, the exploration of each case continues with an interpretation of the e-learning events in terms of the conceptual framework outlined in Chapter Two. Last, each case is evaluated by judging the educational worth of the events described and interpreted. Implications the e-learning events hold for teaching are then discussed. The three major cases I present are the case of the online lecture, the case of the online chat, and the case of the webpage creation.

In Chapter Seven, the emerging themes of the cases presented in Chapters Four through Six are discussed. The major lessons learned through this approach to post-secondary online art appreciation education are then identified to conclude this work of educational criticism (Eisner, 1991). Each of the emerging themes is considered in terms of its implications not only for e-learning, but for the more traditional face-to-face art appreciation classroom, as well. Conclusions are drawn regarding the importance of the study for post-secondary art appreciation education, in general. These themes, implications, and conclusions are extended into potential research for the future, as ways in which subsequent inquiry into e-learning and its role in shaping pedagogical practice in higher education could be pursued.

Conclusion

Each of the three stories presented in this chapter represents an extreme position for three different approaches to post-secondary art appreciation education. We saw Justin's experience in Dr. Wahl's art appreciation classroom, which was a traditional face-to-face approach to art appreciation. This approach is an *art in the dark* approach. Teacher-centered pedagogical strategies, such as the lecture, tend to dominate teaching practices while students like Justin are lulled into passive states of information reception and recall. Alternatively, the *art on your own* approach tends to isolate students, like Rebecca, who receive a great deal of freedom in an extremely student-centered, online teaching technique. This approach provides students with an organized manner of gaining access to information. Yet, they have no processes by which they can understand that information in an increasingly complicated world. They work in physical and cognitive isolation.

The balanced approach, as described according to Rita's experience with it, is one that combines the most effective teaching and learning practices from both of the previous approaches. There is a broad range of pedagogical techniques between the *art in the dark* and the *art on your own* approaches. Instructors can draw upon this myriad of teaching strategies to accomplish differing learning outcomes. Additionally, students can be given opportunities to learn both in tandem with others and independently. Finally, students can process information in a variety of ways from automatic processes, such as information recall, to more consciously processed applications of information, such as analysis. Dynamic possibilities in each of these areas of the art appreciation classroom are possible in a community of inquiry. This community exists in a well-crafted online educational experience that takes advantage of both the

synchronous and asynchronous features available to an early twenty-first-century educator. The community of inquiry model of e-learning is discussed further in Chapter Two.

CHAPTER TWO

Literature Review and Conceptual Framework

Online Distance Learning

Much discourse exists regarding online distance learning and its role in higher education. Arguments range from those that view online distance learning as a unique technology that enhances current practice, to those who see it as revolutionary (Garrison & Anderson, 2003). One source of such widespread speculation is that there is limited research in the area of online distance learning resulting in a shallow understanding about the activity. Fear of and resistance to change in higher education also contributes to this sense of uncertainty. DeLong (1997) situates the source of this trepidation squarely in the medium used in online distance learning: the World Wide Web. The World Wide Web (WWW) is a domain of the Internet, a network of computers connected via telecommunications structures for the purpose of sharing information.

Alternatively, Garrison and Anderson (2003) cite professors' reliance on the lecture as one reason for resistance to online distance learning. "The affordability and ubiquity of e-learning…is clearly disrupting the dominant technology in higher education—the lecture" (p. 24). As the lecture has been the prevailing method of distributing knowledge since the Middle Ages, it remains a model of teaching that is consistent with the values and ideals of higher education. A technologically mediated model of teaching and learning, such as online distance learning, has yet to establish such a harmonious union with the institution of higher learning. Skepticism will meet any approach to online distance learning until such a union exists.

Online distance learning is an extension of distance learning, which is also known as distance education, distributed learning, remote education, online education, open learning or

alternative learning (Stankiewicz & Garber, 2000; Twigg, 2001). Another term used for online distance learning is e-learning, where the "e" stands for electronic. This is the term I will use throughout this study. E-learning is “an approach to teaching and learning that utilizes Internet technologies to communicate and *collaborate* in an educational context. This includes technology that supplements traditional classroom training with web-based components and learning environments where the educational process is *experienced* online”(Blackboard, as cited in Palloff & Pratt, 2001, p. 5).

Problem Statement

Historically, distance learning was a means for students to obtain course credit through correspondence study (Coggins, 1989). Correspondence study was essentially a way to complete course activities by sending and receiving assignments through the postal mail. In the early twenty-first century, distance learning is more complex. Traditional approaches to and conceptions of distance learning are changing primarily due to the online environment of the Internet. Teachers and students today have greater accessibility to the World Wide Web than ever. Through this dynamic medium, alternative - even conflicting - information and viewpoints confront students. Many of these perspectives will differ from those originally presented by the teacher. This change in the instructional design of distance learning experiences owes much to an epistemological shift from a positivist to relativist, or constructivist, view of knowledge and understanding (Hannafin & Hill, 2002). Since understanding and knowledge are dependent upon one’s perspective, the design of an e-learning environment should reflect the wide variety of viewpoints rather than function as a technologically advanced way to disseminate one particular perspective.

In the online art appreciation classroom, such multiplicity may challenge the basic assumptions of the nature and significance of art and art making, as well as the pedagogical strategies employed by teachers. This study centers on these concerns as they affect my own teaching in an online art appreciation course at the post-secondary level. My primary research question is: What do educational events, such as classroom lectures, small group work, student discourse, art making, and teacher-student discourse, look like when post-secondary art appreciation is taught online? In addition to thoroughly describing the nature of such e-learning events, I seek to elucidate the answer to a secondary research question: What is the impact of the use of e-learning upon my art appreciation teaching practice? This question is used to explore the implications the electronic classroom has for traditional art appreciation curriculum and pedagogy.

The secondary research question also considers these implications as they pertain to the knowledge construction and meaning making processes that are engendered through the use of interactive computer technologies. Knowledge construction is the means of developing understanding (Jonassen, 2000). Meaning making processes are the personal perspectives attributed to objects, behaviors, and relationships (Brooks & Brooks, 1993). This study asserts that the knowledge construction and meaning making processes of college students studying art appreciation in the online classroom is of a different nature than that of their peers in the traditional art appreciation classroom because of the differences in media. Instructional approaches in the online art appreciation classroom need, as a result, to change accordingly. Through reflection upon these changing approaches, I evaluate effective pedagogical techniques that contribute to students' experiences, outcomes, and understanding of art appreciation. In turn,

these reflections inform my own perceptions and educational practices. In this manner, I illustrate the ways that electronic pedagogy can influence art appreciation education.

The two research questions are considered through an adaptation of the theoretical framework of e-learning proposed by Garrison and Anderson (2003). Asynchronous pedagogical techniques, in their framework, promote reflective and collaborative activity in the online classroom. Asynchronous teaching practices make possible "anytime, anyplace" learning that allows students and teachers to communicate and interact at different times and in different places using the WWW. My adaptation of this framework incorporates synchronous pedagogical techniques, as well. These techniques have three dimensions: cognitive presence, social presence, and teaching presence.

I describe each of these dimensions in detail as I attend to the role each one plays in a *community of inquiry*. Essentially, this community of inquiry situates the meaning making of an individual learner within a society of learners who are led by a non-authoritarian teacher. This teacher guides students in the process of constructing and evaluating knowledge in an equivocal and multidisciplinary manner. The goal of the community of inquiry is "to structure relationships (order) to achieve understanding and develop 'rationality tempered by judgment'" (Lipman, as cited in Garrison and Anderson, 2003, p. 27). Garrison and Anderson (2003) argue that such an environment is a core element in e-learning.

In this study, the community of inquiry is conceptualized as a metaphoric space traversed along three axes. These axes are a representation of the three dimensions of Garrison and Anderson's (2003) framework. I conceive each dimension as an axis in a three-dimensional cube that can serve as a metaphoric representation of the community of inquiry (see Figure 2.1). This

metaphoric space not only situates particular instances of e-learning. Over time, it serves as a dynamic indicator of how a series of e-learning events move through this community of inquiry.

Conceptual Framework

Figure 2.1 is an adaptation of Garrison and Anderson's (2003) community of inquiry approach to e-learning. Each of the three axes represents the three types of presence required for effective education in the e-learning environment. Each axis stretches indefinitely in two directions along a continuum of educational experiences utilized in e-learning. The three axes of the conceptual framework will be described in the three subsections of this chapter, beginning with Axis A of the Model of E-learning.

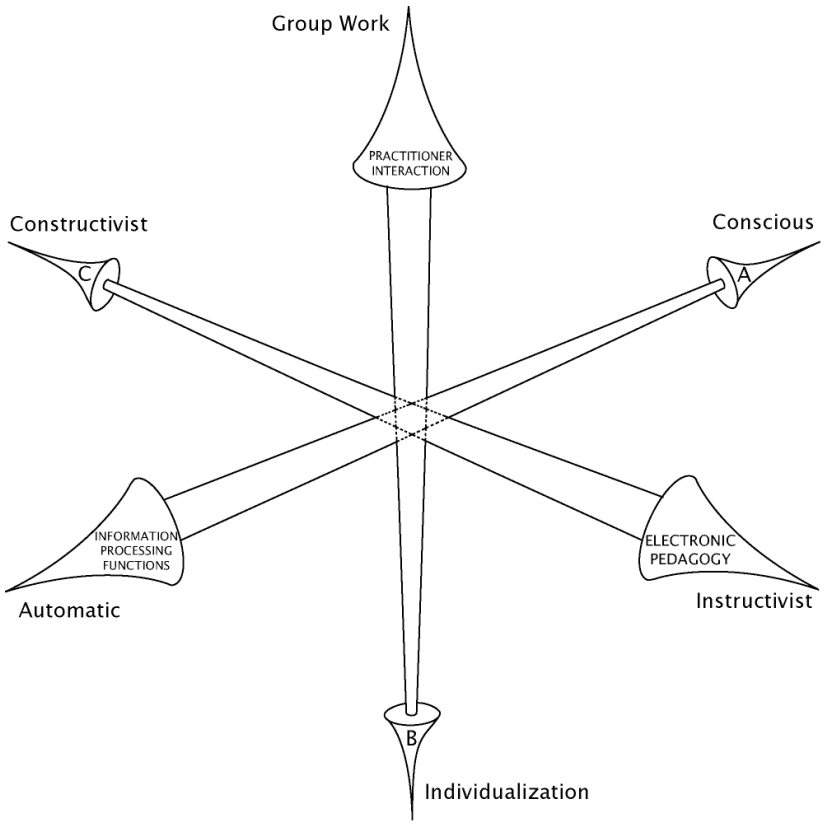

Figure 2.1. Model of E-Learning.

Part I: Axis A, Information Processing Functions

Overview of Axis A

Axis A is the realm of e-learning that corresponds to the types of thinking that occur when a learner is engaged in e-learning events. Garrison and Anderson (2003) describe this realm as it corresponds to the cognitive presence of an individual engaged in learning via interactive computer technologies. *Cognitive presence* is the sum of the specific objectives and desired outcomes of an educational experience. In other words, cognitive presence is a student's achievement of mind that results from the purposeful design of an online learning experience. Garrison and Anderson argue that such achievement is contingent upon sophisticated thinking processes such as critical and reflective thinking. It is through reflective inquiry and critical discourse that a learner can achieve the higher-level thinking indicative of his or her cognitive presence in the community of inquiry. They insist, "cognitive presence is a condition of higher-order thinking and learning" (p. 28). In so doing, the authors maintain that students must be thinking at the highest levels of their cognitive capacity if they are to be engaged in the learning taking place. The proposition omits the lower-level thinking orders, such as recall and knowledge of terminology, often utilized in some quality e-learning experiences.

Marzano's New Taxonomy of Educational Objectives

To fully recognize the variety of e-learning experiences possible along Axis A, the continuum can be calibrated according to a theory of information processing proposed

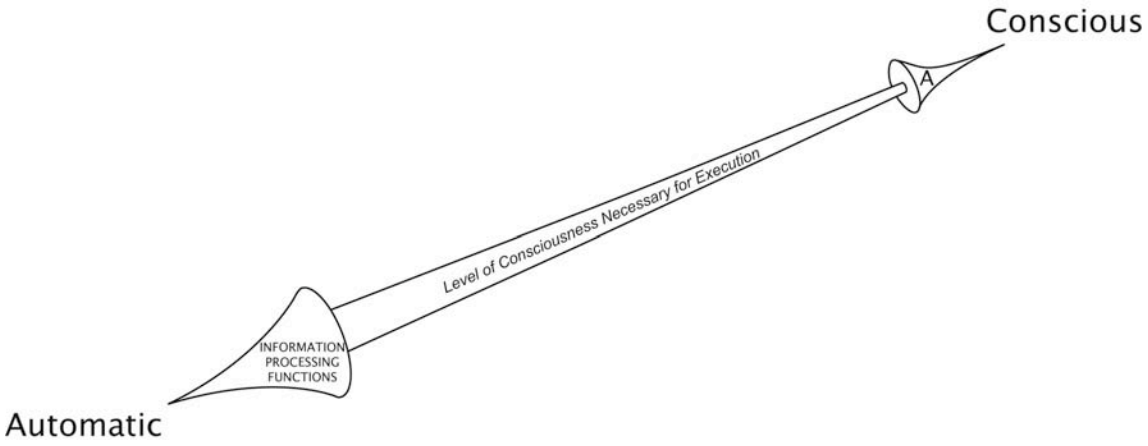

Figure 2.2. Axis A of the Model of E-Learning: Information Processing Functions.

by Marzano (2001). A visual representation of this theory is the basis for Axis A, as seen in Figure 2.2. These calibrations reflect Marzano's three hierarchical orders of thinking: the self-system, the metacognitive system, and the cognitive system, and explain the ways that some processes can control other processes.

Mental Systems of Thought

In this theory of human thought, Marzano (2001) describes the hierarchy in terms of three mental systems, all of which use a person's store of knowledge. Two criteria determine the design of this hierarchical system of human thought. The first of these two criteria is the flow of information. "In terms of flow of information, processing always starts with the self-system, proceeds to the metacognitive system, then to the cognitive system, and finally to the knowledge domains" (Marzano, 2001, p. 13). The second of these two criteria is the level of consciousness required for the processing of information. Self-system processes require more conscious thought than the processes of the metacognitive system, which in turn requires more conscious thought than the cognitive system.

Self-system.

The first mental system is the *self-system*, which "contains a network of interrelated beliefs and goals that are used to make judgments about the advisability of engaging in a new task" (Marzano, 2001, p. 11). The self-system evaluates many factors to make such judgments, including probability of success, importance, relevance, and affect. The metacognitive system will engage if the self-system decides to engage in some new task based on its evaluation of these factors and the available store of knowledge.

Metacognitive.

The *metacognitive* system is responsible for setting "goals relative to the new task….[and] for designing strategies for accomplishing a given goal once it has been set" (Marzano, 2001, p. 12). In addition, the metacognitive system monitors, evaluates, and regulates the function of all other types of thought (Gibbons, 2004). Through strategic and mindful knowledge, the "metacognitive system is in charge of conscious operations relative to knowledge that include goal setting, process monitoring, and monitoring for clarity and accuracy" (Marzano, 2001, p. 49-50). By means of these processes and in relation to the store of knowledge available, the metacognitive system interacts with the cognitive system to assess and determine the nature of new tasks, consider possible coping strategies for them, and eventually accomplishing the new task (Flavell, 2000).

Cognitive.

The *cognitive* system "is responsible for the effective processing of the information that is essential to the completion of a task. It is responsible for analytic operations such as making inference, comparing, classifying, and the like" (Marzano, 2001, p. 12). The cognitive system addresses such operations in relation to the store of knowledge available through retrieval,

comprehension, analysis, and knowledge utilization (Marzano, 2001). These four information processing functions are the basis for the levels of thought that comprise Axis A (see Figure 2.3). Each function describes the educational outcomes, in terms of character of thought, of e-learning experiences and will be elaborated on in the next section.

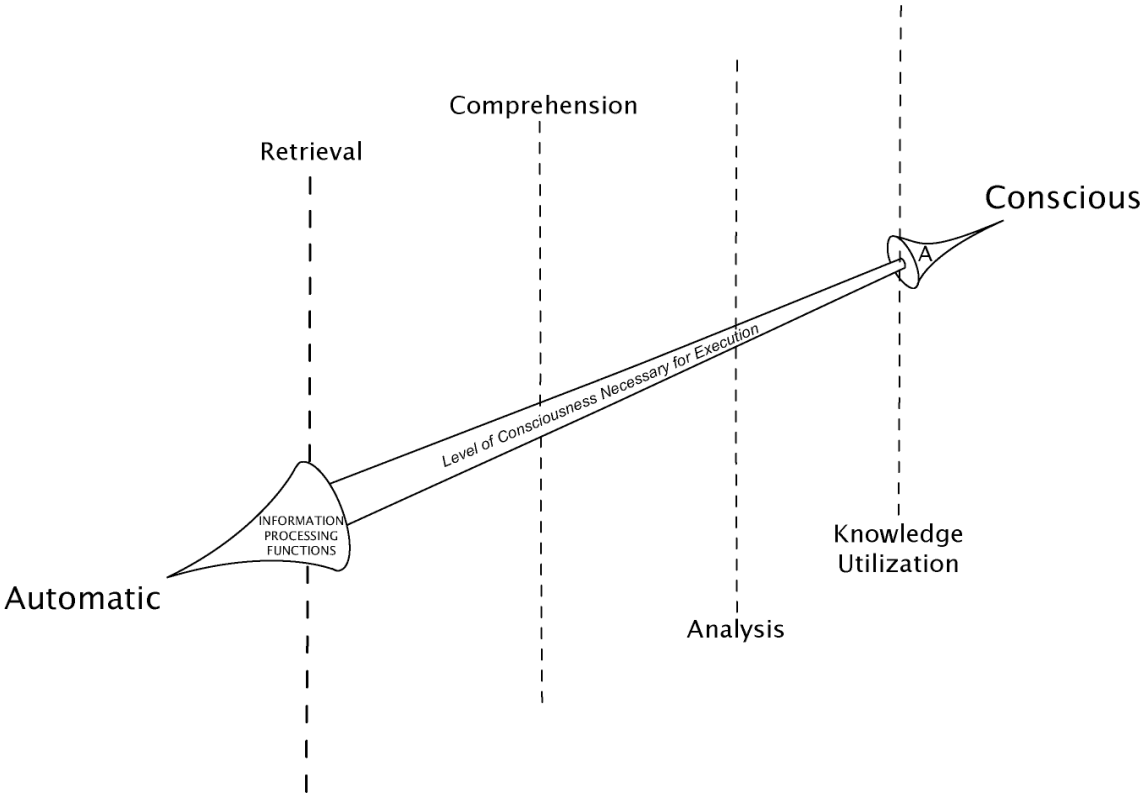

Fig. 2.3. Axis A of the Model of E-Learning, with Marzano's (2001) four levels delineated.

Information Processing Functions

Retrieval

The information processing function Marzano (2001) calls *retrieval* is a highly automatic function of thinking that he describes as "the activation and transfer of knowledge from permanent memory to working memory, where it might be consciously processed" (p. 30). In this transfer process the working memory, which uses data from the permanent memory, acts on the permanent memory. Permanent memory is the store of all a person understands and knows

how to do. More specifically, recall is the action of retrieval involving the simple transfer of details or organizing ideas. Such knowledge is part of the domain of information, which Marzano (2001) refers to as "declarative knowledge" (p. 17). He includes in this domain the kinds of knowledge that can be considered details of content such as vocabulary terms and facts, and the kinds of knowledge that are called organizing ideas, specifically generalizations and principles. Popular television game shows, such as *Jeopardy*, require operation at this level of thought for the quizzing of such declarative types of knowledge.

Retrieval is not limited to recalling this kind of declarative knowledge, but is a possible function for processing information from the domain of mental procedures and the domain of psychomotor procedures. The domain of mental procedures is the kind of knowledge called "procedural knowledge" or "process knowledge" (Marzano, 2001, p.23). This kind of knowledge helps one utilize declarative knowledge in the domain of information. In this way, one can recall and execute procedural knowledge through retrieval. An example of this type of retrieval, particularly of psychomotor procedures, is riding a bicycle. Riding a bicycle is something you can successfully do no matter how long it has been since you last attempted it. This example points to the extremely automatic nature of retrieval as an information processing function.

Furthermore, the domain of psychomotor procedures "is composed of physical procedures an individual uses to negotiate daily life and to engage in complex physical activities for work and for recreation" (Marzano, 2001, p. 26). These procedures are skills, which include foundational procedures such as wrist-finger speed and manual dexterity, and simple combinations of these foundational abilities. Complex combination procedures, which are composed of sets of simple combination procedures, are another subdivision of psychomotor procedures. Marzano (2001) concludes that psychomotor procedures are knowledge because,

quite simply, they are learned. To think of these procedures in another way, a person who exhibits proficiency in this kind of knowledge might, according to Howard Gardner (1983), exhibit "bodily-kinesthetic intelligence" (p. 210).

Retrieval in Marzano's (2001) Taxonomy describes activity such as defining terms, labeling parts of a diagram, ordering the steps of a process, or repeating vocabulary words. Emphasis is upon replicating existing information in a manner that differs little, if at all, from previously accepted formats. A distinction is made between knowledge and the way that knowledge is processed.

Comprehension

Comprehension is the information processing function that "is responsible for translating knowledge into a form appropriate for storage in permanent memory" (Marzano, 2001, p. 33). This translation involves the processes of synthesis and representation. Synthesis requires a distillation of knowledge into an efficiently organized structure and format referred to as a macrostructure (Marzano, 2001). "Evidence that students have effectively synthesized knowledge is that they can produce the macrostructure for that knowledge—a statement of the important or critical elements of that knowledge" (Marzano, 2001, p. 35). Such a process of synthesis has occurred, for example, when a person can remember the generalized events of a story but cannot place all of the specific details contained within that same story.

Representation, as the second and related process of comprehension, "is the translation of knowledge contained in a macrostructure into some symbolic, imagery (i.e., nonlinguistic) mode" (Marzano, 2001, p. 35). In other words, the mind processes information primarily into the linguistic and imagery modes. Marzano (2001) explains, "The linguistic mode is semantic in nature and…expressed as propositions or productions….The imagery mode, in contrast, is

expressed as mental pictures or even physical sensations such as smell, taste, touch, kinesthetic association, and sound" (p. 35). When a student uses some kind of organizational pattern, such as a graphic organizer, to represent information in a symbolic mode, the student has encoded that information into a different format. Thus, the process of comprehension has occurred.

For example, when presented with a verbal explanation of photosynthesis, a student might translate that communication into a labeled drawing of the parts of the process of photosynthesis. At the comprehension level, then, understanding is evident by simple tasks such as description, explanation, or translation of material learned. Students operating at this level might locate a city on a map by using their comprehension of latitude and longitude, or they may review the main points of a lecture or reading through a written report. In e-learning, students who electronically post a written summarization of an assigned reading have demonstrated a well-known form of comprehension of information—reading comprehension.

Analysis

Analysis goes beyond the information processing function of comprehension in that it "involves the generation of new information not already possessed by the individual" (Marzano, 2001, p. 38). This information generation occurs through five analysis processes: matching, classification, error analysis, generalization, and specification. While such processes occur naturally without conscious thought, Marzano (2001) maintains that they contribute to analysis when "they are executed both consciously and rigorously…[to] force the learner to cycle through knowledge many times, changing it and refining it" (p. 38).

Analysis of this kind is similar to the process of accommodation that Piaget (1977) conceptualized in his description of human thought. The means by which learners gain knowledge, according to Piaget, is by filtering their new discoveries through the schemata--

constructed representations that form our working knowledge base-- already in place in order to provide meaning and organization for their experiences. Such a process of adaptation occurs through what Piaget calls *assimilation*, in which a learner internally fuses an encounter with a new object with a preexisting schema, and *accommodation*, in which the learner modifies his or her schemata to the environment when the environment refuses to be assimilated into the schemata. Marzano (2001) directly compares analysis to Piaget's accommodation by insisting that it "involves reorganizing information so that it can produce new insights and be used in new situations" (p. 38).

A student thinking at the level of analysis is expanding the existing repertoire of facts in ways that forces him or her to reflect on and distinguish between the facts by testing them, reorganizing them, and synthesizing them into new thought structures (Linn, 1996). An individual elaborates and extends his or her knowledge by conducting analysis at this level of conscious thought through five analysis processes: matching, classification, error analysis, generalization, and specification.

Five Processes of Analysis

Analysis Process 1: Matching.

Matching is the first of these processes that serves as a fundamental basis of the other four analytic processes. It addresses "the identification of similarities and differences between knowledge components" (Marzano, 2001, p. 39). Many matching tasks are very simple. However, matching in the New Taxonomy includes only complex matching tasks. Such tasks might require one to, for example, not only identify the similarities and differences between two dogs, but how specific characteristics of the two "are key features of their respective breeds and explain how these similarities and differences help that breed" (Marzano, 2001, p. 39).

Analysis Process 2: Classification.

The second analytic process is classification, which "forces the learner to organize knowledge into hierarchic structures" (Marzano, 2001, p. 40). By thinking about classification in these terms, the process becomes much more analytically challenging than the natural classification that humans engage in as a basic part of thought. As defined by the components involved in the process of classification, Marzano (2001) maintains that not only do items and their accompanying characteristics need to be defined and classified, but there must be an identification and explanation as to what sub- and super-ordinate categories the items belong, in order for classification to be considered a process of analysis. An example of classification of this type is the process through which a student would go to identify a super-ordinate and general statistical theory to which Bernoulli's law belongs, as well as a description of the subordinate categories of its many applications. One application of Bernoulli's law, which holds that a large number of items selected at random from a population will reflect the characteristics of that population, is the process of *random selection* used in comparative experimental research methods.

Analysis Process 3: Error Analysis.

Error analysis is the third analytic process Marzano (2001) includes in this level. While people naturally make judgments about the reasonableness or logic of knowledge, "error analysis as an analytic skill within the New Taxonomy involves (a) consciously judging the validity of the knowledge based on explicit criteria and (b) identifying any errors in reasoning that have been presented" (Marzano, 2001, p. 40). In order to accurately judge the validity of an argument, students must be familiar with specific kinds of evidence such as grounds, warrants, and backing, and how these can be tested to prove or disprove a claim that has been put forth as knowledge.

Furthermore, to effectively analyze material, students must utilize error analysis to detect faulty methods of reasoning (i.e., arguing from ignorance, contradiction, etc.). For example, if a health class discussion about the effects of smoking presents a contradiction, a student must begin analyzing any possible errors in each argument. S/he does so by testing the claims of each argument.

Analysis Process 4: Generalization.

The fourth analysis process of generalization involves inferential thinking that Marzano (2001) likens to the process of retroduction, which is neither a purely inductive nor a deductive form of reasoning. Instead, "retroduction is the act of generating and shaping an idea based on one or more cases" (Marzano, 2001, p. 44). This process is the basis of generalization in the New Taxonomy. For example, a student who has been studying specific cases of genocide in history class will generalize the facts, terms, and events of those cases as s/he makes inferences from the information that supports a particular conclusion regarding the nature of genocide.

Analysis Process 5: Specifying.

The final analytic process at this level of the New Taxonomy is specifying. "[S]pecifying is the process of generating new applications of a known generalization or principle" (Marzano, 2001, p. 44). Where the retroductive process involved in the process of generalizing tends to lean more toward the inductive process of thinking, it tends to favor the deductive method when used in the process of specifying. A student involved in specifying will, in essence, take established principles and generalizations that apply to a particular situation under consideration and will identify a personally new application for them by drawing conclusions and making predictions about what is and can be known. "For example, a student demonstrates knowledge specification

by generating and defending statements about what must be true about a specific type of bear given his or her knowledge of bears in general" (Marzano, 2001, p. 81).

Knowledge Utilization

This fourth level of information processing functions contained within Marzano's (2001) New Taxonomy "are those that individuals employ when they wish to accomplish a specific task" (p. 45). Such processes are knowledge utilization processes because they require a high level of conscious thought to make knowledge useful as it is purposefully engaged in solving specific problems of inquiry. Four categories of knowledge utilization processes are included in the New Taxonomy: decision making, problem solving, experimental inquiry, and investigation.

Decision making is a process involving the knowledge of two or more alternatives and the selection between them. Problem solving requires meeting a specific goal while overcoming an obstacle or limiting condition. "Experimental inquiry is the process of generating and testing hypotheses for the purpose of understanding some physical or psychological phenomenon" (Marzano, 2001, p. 47). Finally, investigation is similar to experimental inquiry because of the generation and testing of hypotheses in both processes. However, investigation involves the rules of evidence discussed in the section on error analysis above. Therefore, investigation requires a well-constructed argument as evidence whereas experimental inquiry necessitates the statistical testing of a hypothesis.

To utilize knowledge, students must initiate creative solutions to data sets that present an inherent problem in their current state. Perhaps the presentation of information is in such a format that students cannot readily identify the categorical structure and must invent a new one that makes sense to them. To achieve such ends, learning activities might encourage students to assemble, construct, design, develop, or propose solutions to novel problems.

In e-learning, the Multimedia Forum Kiosk (Linn, 1996) provides a good example of this kind of learning environment. This computer program is a Web-based discussion area that allows students to contribute their answers to given problems. In addition, the structured discussion that develops as students place messages online provides the venue for the presentation and recognition of alternative perspectives. Students gain experience in formulating justified responses to difficult problems while they manage the information presented by their peers and may organize their own personal understanding of the multiplicity of potential solutions to that problem. To conclude, Marzano (2001) maintains, "the knowledge utilization processes of the New Taxonomy generate new products of some sort" (p. 48).

A Look Back at Axis A

In this section, some of the kinds of information processing functions that are possible in e-learning experiences according to Marzano's (2001) New Taxonomy of Educational Objectives have been described. The range of ways a student might utilize thinking processes in e-learning experiences has been arranged hierarchically to indicate the level of conscious thought necessary to conduct each type of information processing function. Retrieval processes described require little conscious thought to execute; knowledge utilization processes require much. All of the information processing functions presented joins to provide a reconceptualization of Garrison and Anderson's (2003) sphere of cognitive presence in an e-learning community of inquiry.

In the following section, I describe the second component of such a community of inquiry: social presence. I also discuss how I reconceptualize this particular component of e-learning to provide a clearer picture of the role that social presence plays in e-learning experiences. In so doing, I present the second axis of the conceptual framework used to describe the e-learning experiences investigated in this study.

PART II: Axis B, Practitioner Interaction

Overview of Axis B

Social interaction in an e-learning community of inquiry is known as social presence (Garrison & Anderson, 2003), which is the projection of a learner's self, as mediated by the form of communication used in an educational experience. Since written forms of communication are common in e-learning today, it is often difficult for a student to establish his or her social presence. However, since an educational social presence is inextricably linked to cognitive presence – cognitive presence is enhanced and sustained when social presence is established – it is incumbent upon a community of inquiry to put forth the effort needed to enhance socio-emotional communication. Socio-emotional communication is, in this context, the adaptation of textual behaviors to reveal social and relational messages. For example, one system of textual notation commonly used in online communication is "emoticons" (e.g., the symbol ;) is an emoticon that represents a winking, smiling face). Students use these symbols to provide clues about emotions associated with submitted text messages. Such forms of socio-emotional communication are important, since the feeling of community and connection among learners is crucial (Tu, 2002) and has been cited as an important contribution to learning outcomes and participant satisfaction in online courses (Palloff & Pratt, 2005). In the Model of E-learning (see Figure 2.1) Axis B represents social presence, the second important component of a community of inquiry in e-learning.

I have chosen to rename social presence as *practitioner interaction* since presence may not result in interaction. Presence does not necessarily guarantee a student's involvement in course activities. In other words, simply being in a classroom does not necessarily mean that a

student will be engaged in learning. Problems of presence are heightened in e-learning, as a student's participation in the activities of an online class is represented in primarily textual forms of *computer-mediated communication*, such as discussion postings.

One example of the necessity of interaction in e-learning, which will be described in Chapter Four, is Tricia's experience in one of the online lectures I conducted with the students. When using Horizon Wimba to deliver this online lecture, I noticed that Tricia's name was included in the list of students logged onto the course website. However, as the session progressed, it became clear that she was not participating in the learning activities of the class since she was not providing any feedback in the text chat. Her presence in the online lecture was not indicative of her level of involvement. For this reason, in particular, social presence is a term that could not capture the depth of involvement that must be a part of quality online learning events.

Practitioner interaction speaks to the socio-emotional engagement of multiple parties in the e-learning community of inquiry, and it indicates various potential levels of active involvement with e-learning experiences. Practitioner interaction is represented as a continuum of social situations ranging from *individualization* at the one extreme to *group work* at the other extreme (See Fig. 2.4). At any point on this axis, the student needs to be active.

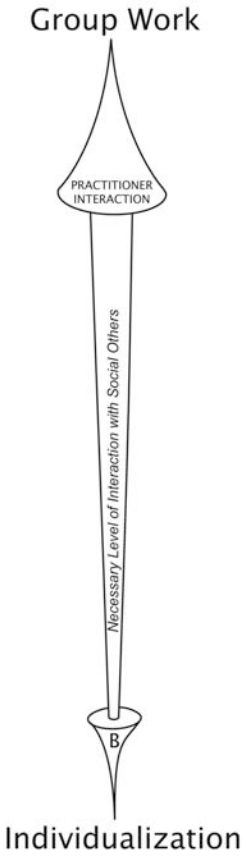

Figure 2.4. Axis B of the Model of E-Learning: Practitioner Interaction.

Individualization may seem like a counter-intuitive term to use to describe some characteristic of social interaction. I use it in the sense of the ideal depiction of education put forth by President James Garfield. He spoke of his favorite college professor: "The ideal college is Mark Hopkins on one end of a log and a student on the other" (Garfield, as cited in Peskin, 1978, p. 34). Gene Maeroff (2002) reframes this kind of practitioner interaction as the kind made possible through e-learning, whereby the metaphoric log is generated by the digital networks of interactive computer technology. Moreover, individual forms of interaction dovetail with social forms in the process of knowledge construction (Moallem, 2003), necessitating a place on Axis B for both.

At the other end of Axis B resides the type of practitioner interaction seen most typically as small group work in e-learning experiences. In order to provide structure for the realm of practitioner interaction, I have selected four particular theories of learning, all of which address the role of the individual in the context of a social learning environment. They are Vygotsky's Social Constructivism (1926/1997), Rogoff's Apprenticeship in Learning Theory (1990), Dewey's Experiential Learning Theory (1916, 1933), and Piaget's Cognitive Constructivism (1977). In the following sections, each of these theories, as they have informed the levels of practitioner interaction (see Figure 2.5) possible in e-learning, will be described.

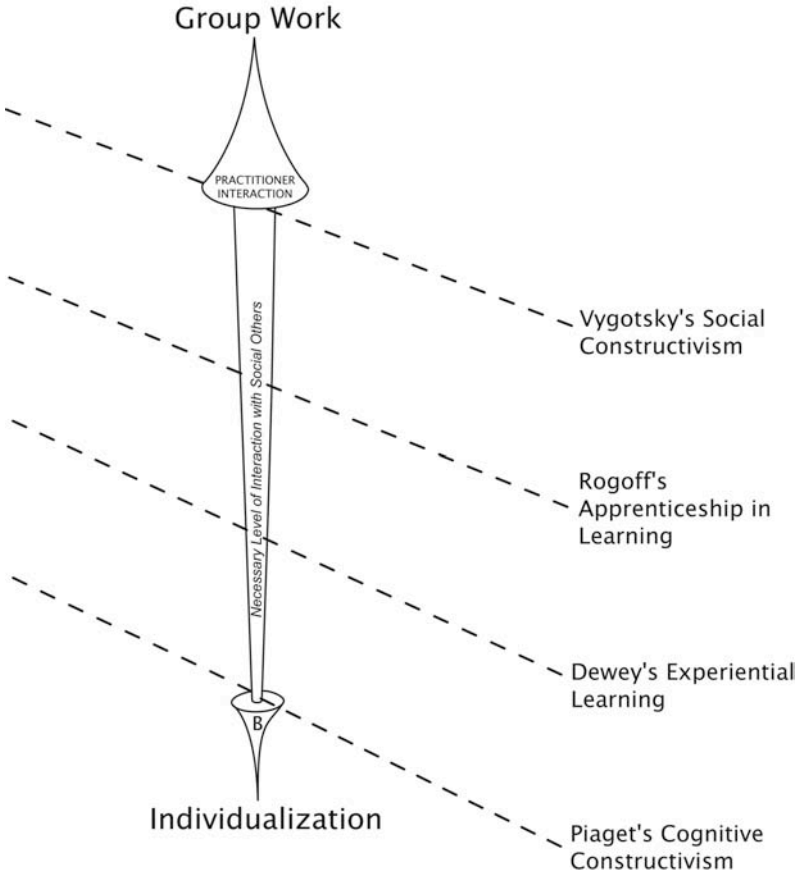

Figure 2.5. Axis B of the Model of E-Learning, with four levels delineated.

Theories of Learning

Vygotsky's Social Constructivism

Vygotsky (1926/1997) placed the burden of education squarely upon the child's social environment and believed that "the nature of man's education, therefore, is wholly determined by the social environment in which he grows and develops" (p. 211). This emphasis upon the social context of the construction of knowledge is known as social constructivism (Richardson, 1998). Vygotsky maintained that an individual's internalization of social patterns observed in his or her daily life fuels cognition. The process of this internalization has three aspects essential to the development of cognition.

First, the internalization of social patterns becomes dominant in the individual's life, "transforming and determining forms of knowledge and cognition as the child develops" (Richardson, 1998, p. 157). Second, humans' cognitive structures advance well beyond the forms seen in other species because of this process of internalizing social patterns. The example Richardson (1998) uses as an illustration of such cognitive structures is human memory. He explains that because of the demands of social cooperation and communication in early human history, we needed a way to expand the memory function as we performed certain social tasks such as counting and simple computation. This need led to the invention of "simple tallies—auxiliary tools that…vastly expand the memory function, transforming the natural function in the process" (Richardson, 1998, p. 158). Third, the dynamic and interactive relationship between the individual and his or her social group requires a profound creativity in the internalization of social patterns. It is this relationship that acknowledges the "'original ideas and creative contributions of individual minds' while explaining 'the achievements of social history'" (Markova, as cited in Richardson, 1998, p. 159).

Contemporary educational practice often uses these three components of Vygotsky's social constructivism, or socio-cultural learning theory. The concept of the *zone of proximal development* is particularly attractive to educators who embrace Vygotsky's theory of cognition. According to this concept, the child's social interaction with more capable peers or adults assists him or her in performing activities that are slightly beyond his or her level of competence (Rogoff, 1990). E-learning experiences that incorporate opportunities for group work encourage students to solve problems together in collaboration, which can lead to practitioners developing relationships with one another as members of a virtual community. More importantly, such relationships provide the basis for cognitive growth as individuals internalize the social patterns of their learning group.

Rogoff's Apprenticeship in Learning Theory

The apprenticeship model is the basis for Barbara Rogoff's (1990) theory of development. Her theory provides additional conceptual background for the practitioner interaction axis of the Model of E-Learning (see Fig. 2.1). *Guided participation* is the core of Rogoff's theory about apprenticeship in thinking and refers to children's participation in culturally valued activities. Children must navigate these activities in the context of social relationships. It is in these relationships that a novice's cognitive development takes place. Rogoff sees the learning individual and her environment as inextricably linked, "the individual's efforts and sociocultural arrangements and involvement are inseparable, mutually embedded forces of interest" (Rogoff, 1990, p. 27).

It is important to note Rogoff's emphasis upon the learning individual's efforts in navigating the guided participation through which learning takes place. This emphasis upon the child's responsibility for learning distinguishes Rogoff's guided participation from Vygotsky's

zone of proximal development. “It should be emphasized that the social guidance of development is jointly arranged by the participants. Both adult and child are responsible for structuring and pacing the instructional communication and learning activities” (Rogoff, Malkin, & Gilbride, 1984, p. 35).

Vygotsky’s zone of proximal development, by contrast, is a site of learning in which an expert presents learning activities to a novice for a specifically designed purpose the expert has devised. Bruner (1984) points out that in Vygotsky’s native Russia, the zone of proximal development initially provided a site of inculcation for the teaching of Marxist theory. Such learning experiences are “a matter of somebody with knowledge and awareness scaffolding a task for somebody without knowledge and awareness until the latter becomes capable of ‘reaching higher ground’” (p. 95). The zone of proximal development was, then, the instrument used to provide an opportunity for “the child to enter into relationship with somebody wiser than himself who would provide the necessary concepts and consciousness that would enable him to make the epistemic leap forward that Vygotsky saw as the promise of the Revolution” (Bruner, 1984, p. 96). Therefore, based on Rogoff’s emphasis of the individual as equal partner in guided participation, I distinguish her theory from Vygotsky’s social constructivism. The individual takes more responsibility for learning in Rogoff’s theory than he does in Vygotsky’s theory.

To enact Rogoff’s apprenticeship in learning theory, e-learning events must meld environmental and individual forces into one entity providing a richly woven web of relationships for the development of meaning. This can occur with the high level of interaction made possible through forms of communication in e-learning such as e-mail. Students can utilize e-mail to communicate with their peers and/or their teachers at any time. The dialog can become the means of a relationship where the more skilled or experienced member of the relationship

becomes the guide to his or her "apprentice" who navigates through the learning activities with the mentor's assistance. The social and physical context of the learning environment is vitally important to such a *cognitive apprenticeship* (Brown, Collins, & Duguid, 1989).

Jacqueline Dempster (2003) describes an online learning project conducted in the United Kingdom that might be utilized in a cognitive apprenticeship, such as that promoted by Rogoff (1990), Lave (1991), and others (Collins, 1991). ANNIE (Accessing and Networking with National and International Expertise) is an e-learning system that augments "student collaborative learning by accessing and networking with remote experts using Web-mediated videoconferencing and other communications programs" (p. 129). Essentially, when students need the help of more knowledgeable peers or experts, they can find immediate support through the synchronous features of this e-learning model.

Dewey's Experiential Learning Theory

Dewey's (1933) emphasis upon the learner's independence in the reconstruction of meaning through reflective thinking differentiates his theory of learning from Rogoff's. In her apprenticeship in thinking theory, an individual makes meaning for himself in and through the social context in which learning takes place. For John Dewey, an individual's development is contingent upon reflective thinking. He defined reflective thought as "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (Dewey, 1933, p. 9). Thinking of this kind is the method of an educational experience. "Thinking is the process of creating meaning through the process of actively making connections" (Garrison, Archer, & European Association for Research on Learning and Instruction., 2000, p. 21).

Such thought is derivative of experience with the world, as others share it with us. "He [Dewey] viewed experience as biological and social. As emerging through transactions between people and the physical and social world with which they engage" (Roschelle, n.d., para. 5). In an educational context, this kind of interaction can occur through conjoint activity between a student and his or her teacher.

The role of the teacher, according to Dewey, is to facilitate such transactions in order that the student can conduct reflective inquiry into troubling or problematic situations. "By inquiry, Dewey means a practical activity that transforms the situation into one that is more clearly articulated, unified, and comprehensible, and in which the directions for successful action are now clear" (Roschelle, n.d., para. 6). The teacher, then, must interact with each student in order to frame such opportunities for practical activity in e-learning experiences. In e-learning, a teacher and a student can utilize e-mail correspondence to carry on in-depth conversations that allow for reflective thought and "transmission [that] occurs by means of communication of habits of doing, thinking, and feeling from the older to the younger" (Dewey, 1916, p. 334).

Ultimately, then, an individual's development is dependent upon the life of the community. The social and the individual are inseparable for Dewey who saw society as "individuals-in-their-relations" (Dewey & Childs, 1981, p. 80). However, Garrison and Archer (2000) point out that, according to Dewey, "education is a process of social interaction for the purpose of serving individual development" (p. 18). The distinction that Dewey makes is one of dependency *and* purpose. "Dewey's ideas are essentially about experience and reflective thought with regard to having students collaboratively generate ideas and reconstruct experience, thereby confirming meaning for themselves" (Garrison et.al., 2000, p. 23). Because of its emphasis of the individual's dependency upon social others *for the purpose of* that individual's development of

meaning, Dewey's theory belongs near the individualization end of Axis B of the Model of E-Learning. The epistemological theory of Jean Piaget takes the importance Dewey places upon the individual's construction of meaning to its extreme.

Piaget's Cognitive Constructivism

Whereas Vygotsky saw the social context as solely sufficient for development, Piaget viewed it as necessary but insufficient for development (Richardson, 1998). Piaget's (1977) notion of schemata in the development of cognition acknowledges the element of the individual person in the construction of understanding. As discussed previously, schemata are essentially ideas that we construct in our minds from our direct experiences with life (Mooney, 2000). Our personal life histories are the basis of such constructions. "In some sense, perception is of no direct use at all in informing us about the world. It is our previously elaborated understanding that enables us to make any sense of what we perceive" (Piaget, Gruber, & Voneche, 1995, p. xxiii).

Piaget maintained this position, cognitive constructivism, and its most fundamental proposition—that learning is an active process in which students construct their own knowledge. Such knowledge building is possible only when students construct new ideas or concepts based upon their current or past knowledge.

E-learning events that place learners in cognitively challenging situations are important for a teacher to develop. Additionally, it is incumbent upon the teacher to "be continually vigilant and keep in mind the particulars of each student's thinking" (Glaser, as cited in Richardson, 1998, p. 140) in order that knowledge might be presented for learning in appropriate ways through the proper social contexts in the virtual community.

It is important to distinguish Piaget's emphasis upon the individual's internal processing of information through schematic structures from Dewey's experiential learning theory. Dewey's learning theory places a learner's development of thinking squarely within the relationships that learner develops with those around him. These social relationships are important because they provide the experiences with the world that prompt the reflective thinking that must occur for that individual to make sense of the world around him. Piaget's cognitive constructivism, on the other hand, places the burden of learning upon the individual as he comes to make sense of his world through his self-guided experience with that world. The role of a social other in this process, for Piaget, is simply that this social other (usually a teacher) presents opportunities for the learner to develop cognitively. Sometimes this development might occur through social encounters; however, usually it occurs through individual experiences. It is for this reason that I differentiate Piaget's learning theory from Dewey's learning theory. Piaget's cognitive constructivism is at the extreme end of the *individualization* end of Axis B.

A Look Back at Axis B

Throughout this section, I have provided a structure for the second important aspect of a virtual community: practitioner interaction. The structure of this axis of the Model of E-Learning (see Figure 2.1) is a representation of the role that social interaction plays in e-learning experiences. Four major theories of the development of thought provide clarity for the structure. As seen in figure 2.5, a dotted line represents each of the theories and its respective place on Axis B.

Each of these selected theories is based on a view of knowledge that maintains it is "*made"* by us and our way of experiencing, rather than *given* by an independently existing

objective world" (von Glasersfeld, 1987, p. 5). Therefore, the whole of Axis B exists within a constructivist perspective on the nature of knowledge. This axis eschews the metaphor of student as blank slate or empty vessel. It assumes that learning will only take place if a student opens herself to new information that many disrupt or extend an existing schema—or represents a goal to which the student seeks guidance in attaining. As von Glasersfeld (1987) continues, he acknowledges that such a "view of knowledge, clearly, has serious consequences for our conceptualization of teaching and learning" (p. 6). It is to a presentation of some theories of teaching that I now turn. I will describe theories of teaching that are both constructivist and instructivist.

PART III: Axis C, Electronic Pedagogy

An Overview of Axis C

The third and final axis of the Model of E-learning (see Figure 2.1) is informed by Garrison and Anderson's (2003) third component of the community of inquiry model of e-learning: teaching presence. *Teaching presence* is "the design, facilitation and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (Anderson et al., as cited in Garrison and Anderson, 2003, p. 29).

Teaching presence will be described here as *electronic pedagogy* (Palloff & Pratt, 2001). Because of the nature of the educational platform of e-learning, the teacher must pay attention to certain things that are of concern in virtual classroom practice. For example, an online educator must establish learning opportunities that encourage students to critically reflect on material, engage in lively discussion with one another, and research given topics using the Internet all in

an effort to illuminate their understanding of course material (Palloff & Pratt, 2001). Additionally, electronic pedagogues must pay attention to a few key areas, which include the following:

> [E]nsuring access to and familiarity with the technology in use; establishing guidelines and procedures that are relatively loose and free-flowing and generated with significant input from participants; striving to achieve maximum participation and "buy-in" from the participants; promoting collaborative learning; and creating a triple loop in the learning process to enable participants to reflect on their learning, themselves as learners, and the learning process. (Palloff & Pratt, 2001, p. 26)

It is incumbent upon the teacher of an online community of inquiry, therefore, to maintain a fine balance between teacher-centered instruction and student-centered construction of knowledge as he or she establishes teaching presence to make possible social and cognitive presence.

To provide some structure to the realm of electronic pedagogy, I have delineated a continuum for Axis C between two poles representing two differing approaches to teaching: instructivist, and constructivist (see Fig. 2.6). In e-learning, there are plausible avenues for both modes of teaching. A metaphor for the instructivist approach might be the *sage on the stage*, in which teaching is seen as a delivery of knowledge; whereas, a metaphor for the constructivist approach might be the *guide on the side*, where teaching involves the design of activities that "assist learners in constructing and refining individual representations and personal understandings" (Hannafin & Hill, 2002, p. 73). I mirror Garrison and Anderson's (2003) view that neither approach is superior to the other. Instead, "considering the inherent complexity and challenges of an educational experience, there may be a place for either or both as the experience develops" (Garrison & Anderson, 2003, p. 77). What follows is a brief overview of both the instructivist and constructivist pedagogical stances.

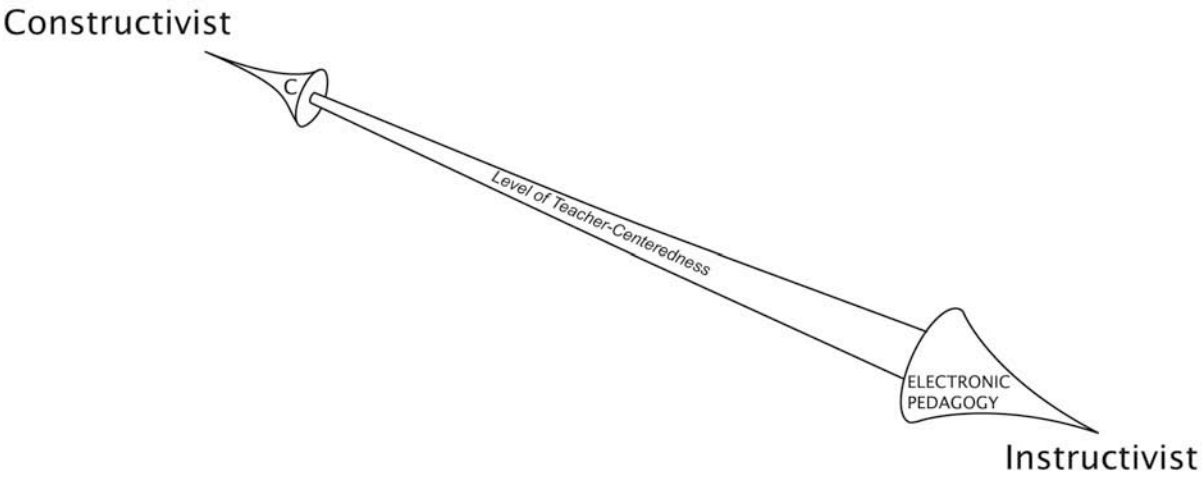

Figure 2.6. Axis C of the Model of E-Learning: Electronic Pedagogy.

Instructivist Pedagogy

Particular theories of learning inform instructivist techniques of teaching. A general summary of these theories of learning is that "knowledge is attained passively by information transfer from a knowledgeable authority figure (teacher) to the learner" (Diaz, 2000, sec. 2, para. 2). This view of learning as a passive, teacher-centered enterprise is appropriate since—according to the instructivist—knowledge is an external, independent entity that teachers give to students. Emphasis is upon the method of distribution, with little regard given to student learning styles or preferences.

One such method of knowledge dispensation is the information transmission method, more popularly known as the lecture. Thompson (1999) describes this approach in the following way: “the lecturer selects a body of knowledge, organizes it, delivers it to students via readings and lectures, expects the students to absorb the material as passive recipients, and then to feed it back in essays and exams” (p. 29). This method of teaching is efficient and useful in the art classroom when important information must be disseminated according to the needs and desires

of the teacher as she instructs students in course content, art techniques, or safety procedures in the studio.

Constructivist Pedagogy

Constructivist strategies of teaching place emphasis upon the students taking an active role in the process of learning. "The 'constructivist' learning perspective asserts that the learner constructs new knowledge through a process of relating new information to prior knowledge and experience" (Diaz, 2000, sec. 2, para. 4). Constructivist theory has implications for students and teachers alike. Constructivist teachers are to act as facilitators who engage students in active dialogue, encouraging them to discover principles for themselves. Additionally, the instructor plays the role of translator, adjusting information into appropriate formats for the learners' current state of understanding. Perhaps the most common educational implication of constructivism is that "the knowledge structures that a child currently has will influence both the level of current problem solving *and* the ease with which he or she may acquire additional knowledge in the same domain" (Richardson, 1998, p. 140).

Contemporary educational theorists continue to translate constructivism into present-day classroom practice. Sandholtz, Ringstaff, and Dwyer (1997) describe constructivist classrooms as *knowledge construction classrooms* where students are engaged in collaborative processes of reflective learning. Brooks and Brooks (1993) advocate the establishment of classroom environments that encourage students to think about and explore the realm of ideas, not facts.[1]

[1] Dewey (1933) spells out the dueling roles of facts and ideas by defining facts as data and ideas as suggestions and possible solutions. He maintains that the two factors are indispensable and correlative to the process of reflective thinking. "Mere facts or data are dead, as far as mind is concerned, unless they are used to suggest and test some idea, some way out of difficulty. Ideas, on the other hand, are mere ideas, idle speculations, fantasies, dreams, unless they are used to guide new observations of, and reflections upon, actual situations, past, present, or future" (Dewey, 1933, p. 106).

Prater (2001) maintains that constructivist techniques might be facilitated through the use of interactive computer technology that "assists students in the construction of meaning for concepts" (p. 48) about art.

According to both instructivist and constructivist views of knowledge, the teacher is to play a particular role in the electronic classroom. The following four levels of electronic pedagogy have been selected to reflect those teaching roles. I distinguish between the four levels according to the amount of teacher-centeredness the particular pedagogy maintains. Those pedagogies that are instructivist are more teacher-centered, and those pedagogies that are constructivist are less teacher-centered.

The following sections serve as an introduction to the variety of ways instructivist and constructivist approaches to teaching can manifest themselves in electronic classroom practice. In an effort to make subtle distinctions in teaching techniques that draw on both instructivist and constructivist theories of learning, four levels of electronic pedagogy that can be feasibly adopted in e-learning (see Figure 2.7) are discussed. They are *teaching as diagnosis*, *teaching as scaffolding, teaching as Socratic method,* and *teaching as information transmission.* An example of each of these four levels will be provided to illuminate each pedagogical approach within the realm of electronic pedagogy.

Pedagogical Strategies

Teaching as Diagnosis

The pedagogical strategy I am calling *teaching as diagnosis* is a form of teaching that is extremely student-centered, and is therefore, placed at the terminus of the constructivist end of Axis C. The idea of *teaching as diagnosis* is that a teacher's role in the classroom is to act as a diagnostician, and not an active instructor. The teacher's job, according to this pedagogical

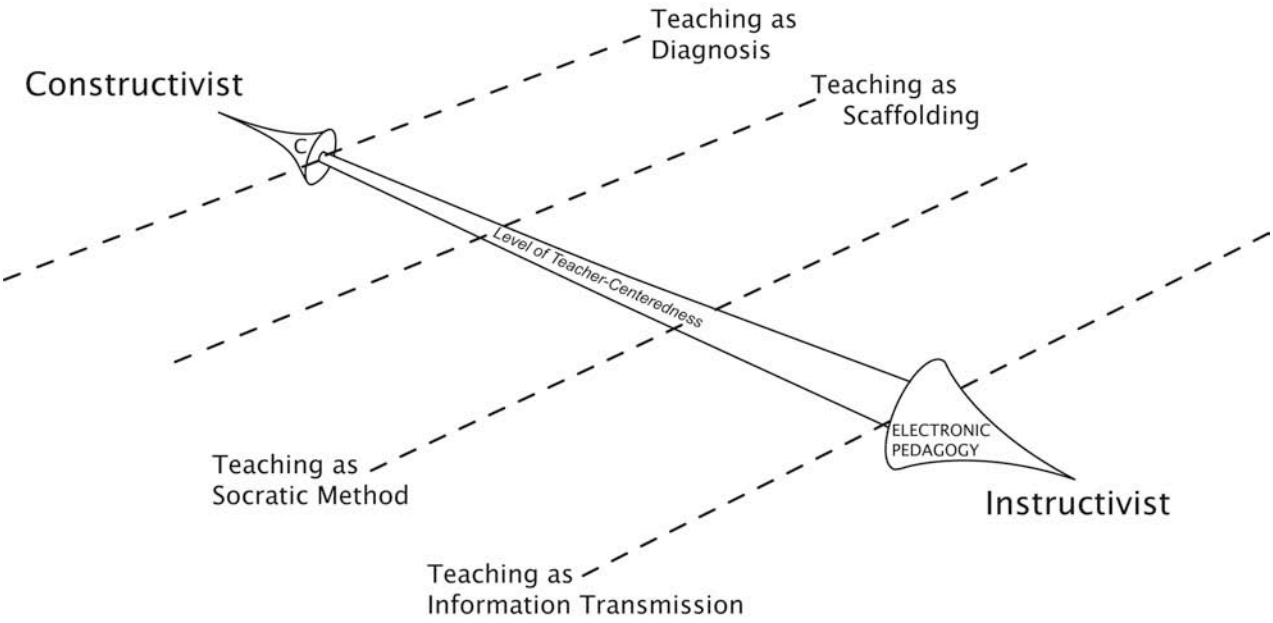

Figure 2.7. Axis C of the Model of E-Learning, with four levels delineated.

strategy, is to provide an intellectually stimulating classroom environment with bountiful sites of individual learning. The teacher, as a diagnostician, is primarily an expert in recognizing stages of development in children, and providing learning opportunities that are developmentally appropriate for each child accordingly.

Piaget's view of the role of a teacher forms the basis of this pedagogical strategy. As a diagnostician himself at the Jean-Jacques Rousseau Institute in Geneva, Switzerland, Piaget held a somewhat dim view of teaching as instruction. According to Susan Pass (2004) Piaget's belief in this "hands-off" approach to teaching was derived from his own experience as a child in school. She claims "Piaget's experience at his elementary school, the Latin School, was less than happy. He got high marks but his classroom teachers did not give him a happy, nurturing education" (Pass, 2004, p. 109). Piaget's denigration of the role of teachers as instructors resulted from his belief that his own teachers fell short in many aspects of classroom practice.

I appreciate the potential applications of the role a teacher might play as a diagnostician. One application is in the design of curriculum. As diagnostician, a teacher strategically "matches the curriculum to the student's level of development, which necessarily involves accurately assessing the student's stage of growth" (Joyce, Weil, & Calhoun, 2000, p. 262-3). Another application is in the design of learning experiences. Piaget's framework espouses teaching as the creation of environments in which students receive the maximum opportunity to cognitively grow and change. "The teacher's function is to arrange for learning experiences that facilitate stage-relevant thinking and to organize instruction so that students can initiate the activity and discover for themselves the logical connections between objects or events..." (Joyce, Weil, & Calhoun, 2000, p. 266-7).

More simply, there are three roles for the teacher in this teaching as diagnosis strategy: 1) to organize the learning environment, 2) to assess children's thinking, and 3) to initiate group activities such as discussions and other social learning opportunities (Joyce et al, 2000). Teaching as diagnosis is much more than a *laissez-faire* approach to teaching; it is teaching by an ever-present guide who is self-effacing to the point of becoming a seemingly detached observer. In reality, however, the teacher is attending to all of the aspects of his or her classroom with the greatest of care.

In e-learning, a teacher must attend to all of the particulars of a classroom in a much different way while performing the role of a teacher-diagnostician. As Garrison and Anderson (2003) point out, the heart of an e-learning experience is the creation and maintenance of a community of inquiry. It is in this community that students collaborate and reflectively process understanding of a given e-learning problem. The role of the teacher as diagnostician is to make such a process possible. "The focus here is managing the process and monitoring the depth of

understanding. This involves facilitating and focusing the discourse, providing appropriate insights and information when needed, and seeking some common understanding or insight" (Garrison & Anderson, 2003, p. 85).

Teaching as diagnosis, in this case, occurs when the teacher provides structure and monitors progress of learning through the written text of computer conferencing.

In summary, teaching as diagnosis places a great deal of importance upon the student-centeredness of teaching—a teaching role that Piaget promoted. The teaching as diagnosis pedagogical strategy is the least teacher-centered approach to teaching included as a part of Axis C. I will move now to a description of the pedagogical strategy I call teaching as scaffolding.

Teaching as Scaffolding

In the pedagogical strategy of *teaching as scaffolding*, the role of a teacher is more prevalent than that seen in the previous section. However, the emphasis of teaching according to this strategy remains the student. As its name implies, this pedagogical stance is built upon the concept of scaffolding. *Scaffolding* is a term popularized by Jerome Bruner, even though Vygotsky brought the idea into conception (Pass, 2004). Bruner's use of the term scaffolding "describe[s] a student being brought from the bottom of his stage of development to the top by a caring 'social other' through the use of communication" (Pass, 2004, p. 116). The social other referred to here is most often a teacher. However, a student's peer can also be the social other.

A clear conception of the supporting role played by the teacher as she develops and implements learning opportunities is essential to an understanding of this pedagogical strategy. The teaching techniques used in this strategy (like those used in the teaching as diagnosis strategy) support the student as he or she makes strides toward personal construction of meaning.

A teacher utilizing scaffolding in teaching is providing, in Garrison and Anderson's (2003) words, "temporary support to develop higher cognitive skills" (p. 88).

Despite these similarities in the *teaching as diagnosis* and *teaching as scaffolding* approaches to constructivist teaching, there is a distinction in purpose. For scaffolding to work, there must be a deliberate agenda established by the teacher to guide his pupils to a higher developmental level than they presently operate. In that respect, *teaching as scaffolding* moves closer to the teacher-centered end of Axis C. The teacher, accordingly, plays a greater "hands-on" role in establishing purposefully chosen goals that are above the student's current state of understanding and functioning. The learning opportunities would fall in line with those learning goals and objectives.

Because there is an element of deliberate "stretching" that the student must do to accomplish the challenging goals set for him, uncertainty exists in the learning scheme. Scaffolding alleviates this uncertainty. Supporting the student through the treacherous distance between his present cognitive state and a higher one is similar to Piaget's idea of the *optimal mismatch* (Pass, 2004). According to Piaget, the optimal mismatch is when, "a classroom is set at the highest challenging point for a student's chronological stage of development so that, with effort, a child can move, if the child successfully internalizes the problem, through equilibration to the top of that child's state of development" (Pass, 2004, p. 116).

While Piaget's optimal mismatch seems to place a great deal of responsibility on the individual student for his upward movement of cognitive development, Vygotsky's notion of scaffolding situates the responsibility between an individual and his teacher and/or peers. Mooney (2000) likens scaffolding to the apparatus a house painter uses to support his work when painting parts of the house that would have been out of reach otherwise. She goes on the say, "In

the same way, adults and peers can help a child 'reach' a new concept or skill by giving supporting information" (Mooney, 2000, p. 84). Because of this active role of the teacher in *supporting* learning, I have placed the pedagogical strategy of teaching as scaffolding at a location on Axis C that is more teacher-centered than teaching as diagnosis, yet planted firmly in the constructivist realm of electronic pedagogy.

Teaching as Socratic Method

The ancient Greek philosopher Socrates championed the Socratic method as an approach to teaching. Socrates' student, Plato, captured the nature of the Socratic method in his writings, in which Socrates is portrayed as a shrewd debater who navigates through topics of discussion in a very unique way: by asking questions. He carries on a dialogue with students, strangers, and his fellow philosophers by using questions. Whipple (1997) summarizes the main points of the Socratic method thus:

> [T]he respondent is engaged in dialectic, a search for the true, absolute nature of a thing. The questioner uses *elenchus* [the refutation by which Socrates tests whether a respondent can defend a position] to test and refute the respondent's information. This refutation employs questions and the clarification of terms. The end result of this procedure is often *aporia* [italics added]—the sense of perplexity, shame, ignorance, or "not-knowing." In this regard, part of Socratic method is the admission on one's part that one does not know, as well as the casting off of false ideas. (p. 16)

Since Socrates' aim was to develop within his student awareness of his own misconceptions, the result was essentially a positive one for the respondent rather than a matter of Socrates claiming victory over a less-skilled respondent unpracticed in dialectic. Socrates really was interested in teaching in its very purest form.

In the centuries since the time of Socrates, the method with which he is associated has mutated into an approach to teaching that rarely resembles the Socratic method described above. One change in Socratic method is the use of didacticism, implemented by Plato, which often

focuses on giving theories rather than asking questions (Whipple, 1997). Additionally, Aristotle's use of the *dialectic* changed the practice from its original goal--a search for the essence or truth of a subject through the use of conversation involving question and answer--to a far more egotistical purpose: the search for knowledge that a debater could use to support her argument. This shift in the use of dialectic continued through the ancient Roman schools in the form of oratory and in the study of logic taught in the academies of the Middle Ages (Whipple, 1997).

In the late nineteenth century, for the first time since Socrates implemented it, the Socratic method appeared in schools of law. Since questions guided students through facts about a particular subject, the result was similar to the original aim of Socrates' method. However, the aim of the law school professor was to impart a body of data from the teacher to his or her students for a specifically didactic purpose. "As possessors of this data, the professors are naturally absolute masters of the material; thus there is no sense of going forward together to discover knowledge, as in a Socratic dialectic" (Whipple, 1997, p. 36). Rather, there is a "right" answer, and there is a particular predetermined point at which the student should arrive.

It is this most recent version of the Socratic method that is adhered to as the basis for this point of Axis C. *Teaching as Socratic method* is, therefore, a pedagogical strategy that is at its core mostly teacher-centered since the teacher has a prescribed sequence of questioning designed to lead a student to a corresponding point of understanding. The instructor asks specific questions in a particular order to guide his students to the answer he wants them to know. The following is an example from Rick Garlikov (2003) in which he uses the Socratic method to teach a class of third graders about binary arithmetic. The numbered list that follows represents

Garlikov's questions. Brackets represent his thoughts and actions, as well as the actions of students. The capital letters following each question represent the students' responses.[2]

> 1) "How many is this?" [I held up ten fingers.]
> TEN
> 2) "Who can write that on the board?" [virtually all hands up; I toss the chalk to one kid and indicate for her to come up and do it]. She writes 10.
> 3) Who can write ten another way? [They hesitate than some hands go up. I toss the chalk to another kid.]
> 
> 4) Another way?
> 
> 5) Another way?
> 2 x 5 [inspired by the last idea]
> 6) That's very good, but there are lots of things that equal ten, right? [student nods agreement], so I'd rather not get into combinations that equal ten, but just things that represent or sort of mean ten. That will keep us from having a whole bunch of the same kind of thing. Anybody else?
> TEN
> 7) One more?
> X [Roman numeral]
> 8) [I point to the word "ten"]. What is this?
> THE WORD TEN (Garlikov, 2003, ¶ 5).

The students, in response to 65 additional questions, continue through the Socratic method that he has planned until they arrive at a simple understanding of the way that binary arithmetic works. Many of the questions, he admits, are decided before the class begins. Garlikov (2003) summarizes his goal for the previous example:

> This was to be the Socratic method in what I consider its purest form, where questions (and only questions) are used to arouse curiosity and at the same time serve as a logical, incremental, step-wise guide that enables students to figure out about a complex topic or issue with their own thinking and insights. In a less pure form, which is normally the way it occurs, students tend to get stuck at some point and need a teacher's explanation of some aspect, or the teacher gets stuck and cannot figure out a question that will get the kind of answer or point desired, or it just becomes more efficient to "tell" what you want to get across (para. 2).

[2] On the World Wide Web, see http://www.garlikov.com/Soc_Meth.html for a full description of the process Garlikov uses to utilize the Socratic method in his teaching.

Both the original form of the Socratic method and the less pure forms described in the previous example from Garlikov (2003) are typical of the kind of pedagogical strategy I am choosing for this location of the continuum of electronic pedagogy. *Teaching as Socratic method* is, then, an approach to instructivist practice that maintains a moderate level of teacher-centeredness while consideration of the student's needs retains some importance.

Teaching as Information Transmission

The most extreme point of the instructivist end of Axis C is the location of the fourth pedagogical strategy, which I have named *teaching as information transmission*. This pedagogical strategy displays an excessive level of teacher-centeredness. Additionally, the student is not an active participant in learning. Rather, s/he is a passive recipient of knowledge. In general, this strategy is marked by what Larry Cuban calls a *core repertoire*, which consists of teacher-centered tactics such as: "lecturing, large-group instruction, reliance on a textbook and chalkboard, seatwork assignments, recitation, discussion, and teacher-made quizzes and tests" (Cuban, as cited in Duke, 1990, p. 102). Several forms of the strategy of teaching as information transmission are in practice in the early twenty-first century.

One form of this pedagogical strategy is direct instruction. In direct instruction, a teacher is responsible for "explaining a new concept or skill to a large group of students, having them test their understanding by practicing under teacher direction (that is, controlled practice), and encouraging them to continue to practice under teacher guidance (guided practice)" (Joyce et. al., 2000, p. 339). Siegfried Engelmann (1980) championed this approach to teaching through his development of a series of structured curricula for a variety of school subjects. The basic premise of Direct Instruction (note Engelmann's capitalization of the strategy) is that teaching requires a trained adult to communicate facts, according to a script, in rapid succession to a large group of

students. The trained adult is a teacher who is in control of every aspect of the classroom, and orchestrates all learning activities with a high level of efficiency. “The teacher is not a diagnostician, but a reader of a carefully worded document written to eliminate ambiguity and confusion. Learning is defined as successful mimicking of models previously learned” (Brooks, 2002, p. 91).

Implicit in Engelmann’s approach to the teaching act is a corresponding view of children. “Direct Instruction begins with the idea that the learner is a magnificent piece of machinery, capable of learning just about anything we wish to teach” (Engelmann, 1980, p. 38). In keeping with the view of children as easily manipulated machines, Engelmann sees children as devoid of characteristics that make them unique. Therefore, according to his view of children and the teaching act, Engelmann (1980) maintains that with his program of Direct Instruction “it is far more effective to work with a group than it is with individuals. Motivating children is easier, and corrections are more economical” (p. 82).

A second form of *teaching as information transmission* is reception learning. This particular approach is mostly closely associated with the work of David Ausubel (1963, 2000) who attempted “to isolate the variables that control the acquisition, retention, and transfer of large bodies of potentially meaningful, connected discourse of the kind that is typically presented to students in classrooms” (Hudgins, 1971, p. 31). Ausubel (1963) defines reception learning as “the situation where the content of the learning task (what is to be learned) is *presented* [italics added] to rather than independently discovered by the learner” (p. 1). As its name implies, reception learning is a kind of learning in which the student’s main role is to receive the subject matter knowledge that his teacher transmits to him through lectures, textbooks, educational films, etc.

Ausubel (1963) describes the process through which such reception of knowledge occurs by carefully distinguishing it from rote learning as a repetitive parroting of information, and directly promoting a cognitive structure for the transferability of knowledge. This cognitive structure uses *advance organizers*, described as "consist[ing] of introductory material at a higher level of abstraction, generality, and inclusiveness than the learning task itself" (Ausubel, 2000, p. 62). Essentially, "their purpose is to explain, integrate, and interrelate the material in the learning task with previously learned material (and also to help the learner discriminate the new material from previously learned material)" (Joyce et. al., 2000, p. 253). The use of these advance organizers, according to Ausubel, allows students to learn information in meaningful ways. The advance organizer gives students cognitive hooks upon which they may hang that information. For example, "a lesson or text describing the caste system in India might be preceded by an organizer based on the concept of social stratification" (Joyce et. al., 2000, p. 254).

Direct instruction and reception learning are two examples of a wide variety of teaching techniques that are extremely teacher-centered pedagogical strategies. It is important to note that for these and other teaching practices that align most closely with *teaching as information transmission*, the teacher is the center of the learning universe. He is the possessor of a body of knowledge and is in charge of dispensing that knowledge to his students. The students, in turn, are responsible for managing the information presented and committing it to memory. A metaphor for this general category of teaching might be *banking education* (Freire, 1970) in which the teacher is to make deposits of information into the minds of students. The students are to receive, memorize, and repeat this information.

While this metaphor has negative connotations in theory, the strategy is occasionally an appropriate one to use in the classroom. I have seen this strategy used in a middle school art

classroom for great results. The art teacher in this case was wonderfully adept at drilling her students on terminology she presented to them. She used her drilling technique to ensure that her students knew how to pronounce certain art terminology. It was her desire to "drill it in to them" so that they might all be able to discuss art without terminology confusion. *Teaching as information transmission* is, in such contexts, a desirable pedagogical strategy for use in e-learning.

A Look Back at Axis C

For Axis C, I have selected four major categories of pedagogical strategies from the universe of teaching practices used in early twenty-first century classroom practice and have arranged these strategies according to the level of teacher-centeredness characterizing each one. A dotted line demarcates each strategy, as seen in Figure 2.7. Two pedagogical strategies, *teaching as diagnosis* and *teaching as scaffolding*, lie on the constructivist end of Axis C. This is true because of the high level of student-centeredness that is characteristic of teachers operating in these two categories of teaching. The other two major categories of pedagogical strategies, *teaching as Socratic method* and *teaching as information transmission*, lie on the instructivist end of Axis C. A high level of teacher-centeredness characterizes both of these strategies.

For the realm of electronic pedagogy described by Axis C, no single pedagogical strategy is superior. Rather, the possible application of each strategy in specific situations is considered. What is most important to consider for the application of these teaching techniques is the type of objectives an instructor seeks to accomplish. Each of the pedagogical strategies described in this section are suitable for specific teaching aims and goals. In e-learning, the teacher must make choices regarding the appropriate strategies that might be used for particular kinds of teaching and learning.

Conclusion: Using the Conceptual Framework

Part One of this chapter was a description of Axis A, which is the realm of e-learning that is concerned with the way information is processed by a learner. Marzano's (2001) conception of the cognitive system of human thought informs the axis, which is *information processing functions*. Part Two was a discussion of Axis B, which was informed by several theories of learning that all relate to a constructivist view of human thought. This axis is *practitioner interaction*; given that each of the theories that informed it speaks to the importance of a learner's interaction with a social other for the acquisition of knowledge and the construction of meaning. In Part Three, I described Axis C, which is called *electronic pedagogy*, as it relates to several possible teaching strategies in e-learning.

Selection of E-learning Events

All three axes collectively compose the Model of E-Learning (see Figure 2.1). This model is a concrete representation of the entire realm of e-learning. It is also an adaptation of Garrison and Anderson's (2003) *community of inquiry*, which situates e-learning within a meaningful community of learners who work collectively to derive meaning, as it is tempered by an individual's socially navigated judgment. It provides structure for the conceptual basis of the many concerns of thinking, learning, and teaching that are necessary components of this approach to education. Each axis links, then, to the others for the whole of the educative experience. Every component must be included. An omission would result in a negation of the balances inherent in the e-learning experience.

Alternatively, each axis provides parameters in which a component of e-learning must reside. Since e-learning, as reconceptualized as the metaphoric space of the Model of E-Learning, occurs within a community, then there are points outside of that space. Any activity

occurring outside of this space is not a valid e-learning experience. In Figure 2.8, I have superimposed a gray shaded cube upon the Model of E-Learning. Everything inside the cube is e-learning activity that is valid and credible, situated squarely within the community of inquiry.

Figure 2.8. The community of inquiry.

Note that the points at the ends of each axis are not shaded in Figure 2.8. This is because the teaching and learning activity that would occur there would be out of the bounds of the community of inquiry. There is not a conception, within this study, of what lies beyond the

terminus of each of the three axes of the Model of E-Learning. As outlying activity, it would be impossible to describe the kind of e-learning experience. For example, a student who has removed himself from a particular e-learning activity through his negligence in matters of *practitioner interaction* may have stopped contributing to the online group discussion. He may have also failed to respond to e-mail contact initiated by the teacher. This student, speaking in terms of the theories of learning outlined in Part Two of this chapter, has removed himself from the interaction of a social other. He even fails to engage in discourse with his teacher, as would be the case in that kind of learning described at the extreme end of the *individualization* realm of Axis B (See Figure 2.5).

Such a situation could potentially occur in e-learning. There are ways that extreme situations could occur in terms of each of the three axes. A student could move beyond *knowledge utilization* by processing information at a metacognitive level, for example. His or her activity would then be beyond the scope of the realm of e-learning, according to the Model of E-Learning described, since the four *information processing functions* identified in Part One of this chapter deal only with the cognitive system of human thought. In another instance, a teacher might become so extremely instructivist in his or her orientation to *electronic pedagogy*, as described in Axis C, that s/he dispenses information by means of a written online lecture, fully expecting the students to absorb everything. His or her excessive teacher-centeredness results in the teacher's abandonment of the students. They must fend for themselves, while the teacher focuses on other priorities. Palloff and Pratt (2003) warn of this kind of mistreatment of the e-learning approach to teaching when they describe the kind of teacher who places all course material on a website and takes a vacation for the rest of the semester.

Map and Compass of E-learning

Therefore, the Model of E-Learning becomes a useful tool for use in the selection of those e-learning activities that are and are not describable in terms of the conceptual framework. Additionally, the conceptual framework serves another purpose. It guides us through the entire community of inquiry by serving as a point of reference. As a compass helps us become oriented to the landscape described by a map, so too does the Model of E-Learning help us to become acclimated to the metaphorical space it delineates. Therefore, we can use the conceptual framework not only to theorize the realm of e-learning, but also to view the events of e-learning. For this study, the conceptual framework will act as a referential compass for the mapping of selected e-learning events.

It becomes important, then, to first develop a representation of the way this compass looks in order to provide a working system for mapping the terrain of e-learning. The way I have designed this representation, which I will call the Map of E-Learning, is by superimposing the detailed renderings of Axis A, B, and C (see Figures 2.3, 2.5, and 2.7) over the Model of E-Learning. Dotted lines represent various stations (e.g., *teaching as information transmission* on Axis C) along the axis. Four dotted lines demarcate four different positions along each of the three axes (as seen in Figure 2.9).

In order to provide clarity for the developing representation, I have utilized opacity, boldness, and perspective to emphasize the three-dimensionality of the Map of E-Learning. The portions of the dotted lines that are closest to us are thick and bold. A matrix appears to develop where the dotted lines intersect.

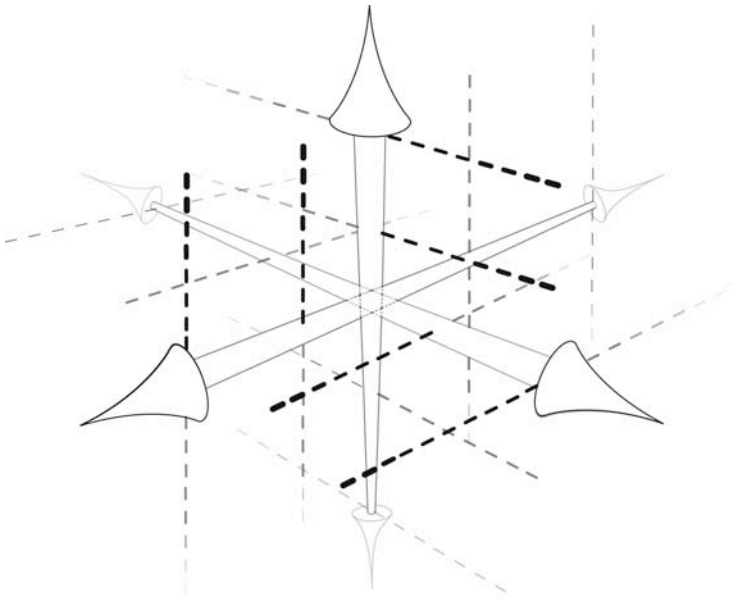

Figure 2.9. The Model of E-Learning, demarcations superimposed.

If the Map of E-Learning is to become a functional tool for the mapping of e-learning events, it is necessary to complete the developing matrix. To do so, a dotted line extends vertically and horizontally out of each station along the three axes. For clarity, I will only erect these lines for the quadrant of the map that is nearest to us. The resulting image, as seen in Figure 2.10, depicts the way that this quadrant's space has been broken up into sections by the vertical and horizontal (note the use of perspective) dotted lines. For the Map of E-Learning, each of the eight quadrants would be the same as the one shown in Fig. 2.10.

The finished Map of E-Learning, which I use for this study, has one final structural detail. I have subdivided the eight quadrants in order to use them for the fine grained-distinctions I make in my descriptions of e-learning events. As seen in Figure 2.11, horizontal and vertical lines (note use of perspective) extend out from each intersection of the matrix superimposed on

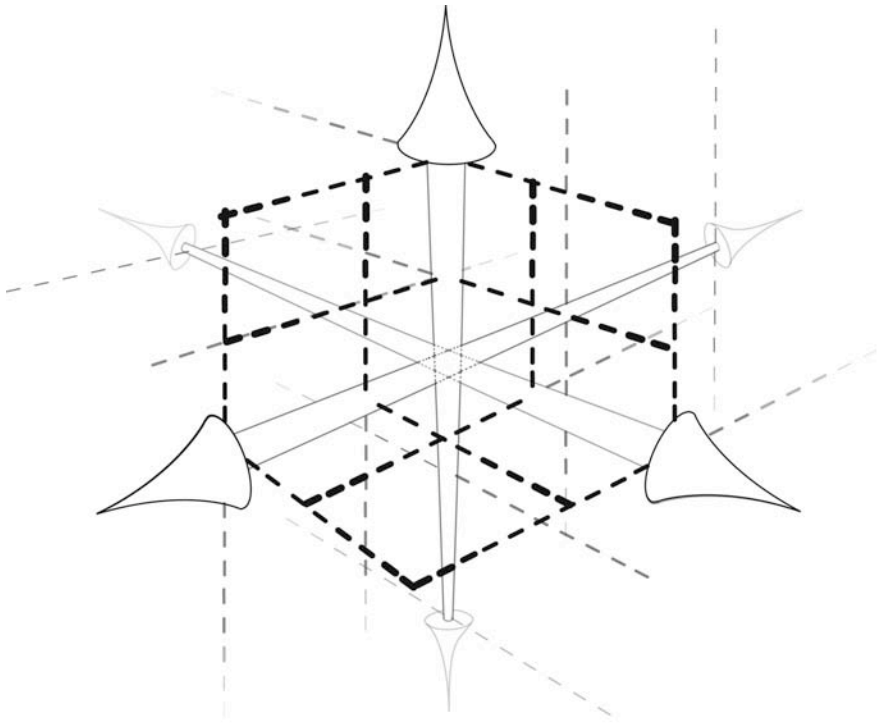

Figure 2.10. A quadrant of the Map of E-Learning.

the Map of E-Learning. Each of the eight quadrants of the Map of E-Learning is similarly treated. The resulting cubes (a total of 64) provide a wide range of possible points for mapping events of e-learning.

To understand how the Map of E-Learning is used, consider its use in determining the nature of the e-learning event described in the following example. An art appreciation teacher designs an art criticism activity for the online classroom via a chat room. In this chat room, the students can view a work of art and post comments by typing messages with their keyboards. Therefore, the entire process is group-based and occurring at the same time for the entire class (i.e., synchronous). The teacher leads students through this synchronous chat by asking questions about the work of art. There is a particular understanding the teacher wants his or her students to attain regarding this work of art—that the use of a black and white color scheme in the painting

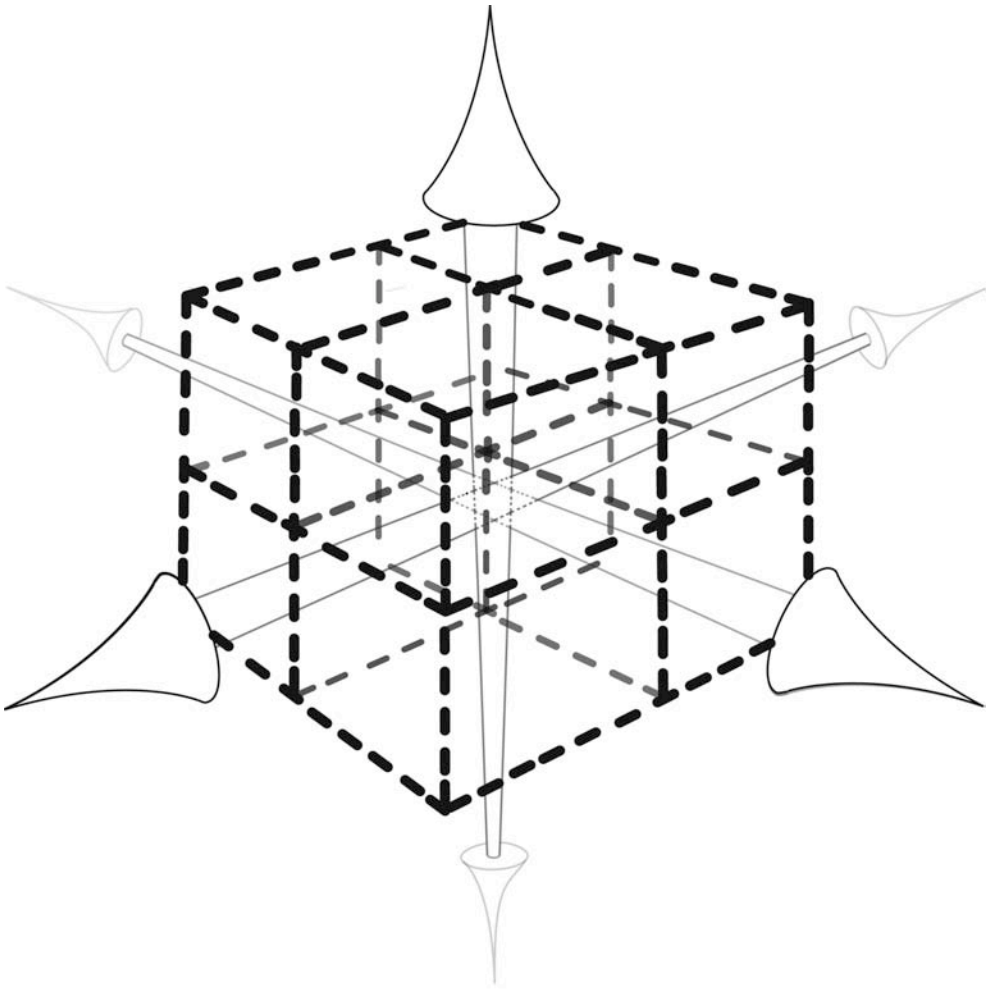

Figure 2.11. The Map of E-Learning, with superimposed matrix.

is called monochromatic. Questions the teacher asks refer to the facts the students had discussed in a previous class, such as “What is color?” “Is white a color?” and “How can paints be mixed to make black?”

If we are to plot this e-learning event on the Map of E-Learning, we would be need to consider how all of the components of the event align with each of the three axes of the conceptual framework. In addition, we would need to determine where along each axis the particular components most closely fit. In this case, we see that a teacher is engaging a *group* of

students in a question and answer session, for which there are *right answers*, and which is successful when students automatically *recall facts* about paint and color. The group setting of this example places the event near the top of the *practitioner interaction* axis. The use of the leading question-and-answer session is an example of *teaching as Socratic method*, which would situate the pedagogical strategy at that point along Axis C. Finally, because the students are calling upon knowledge through the use of automatic recall, the point along Axis A which most closely describes the *information processing function* being used is *retrieval*.

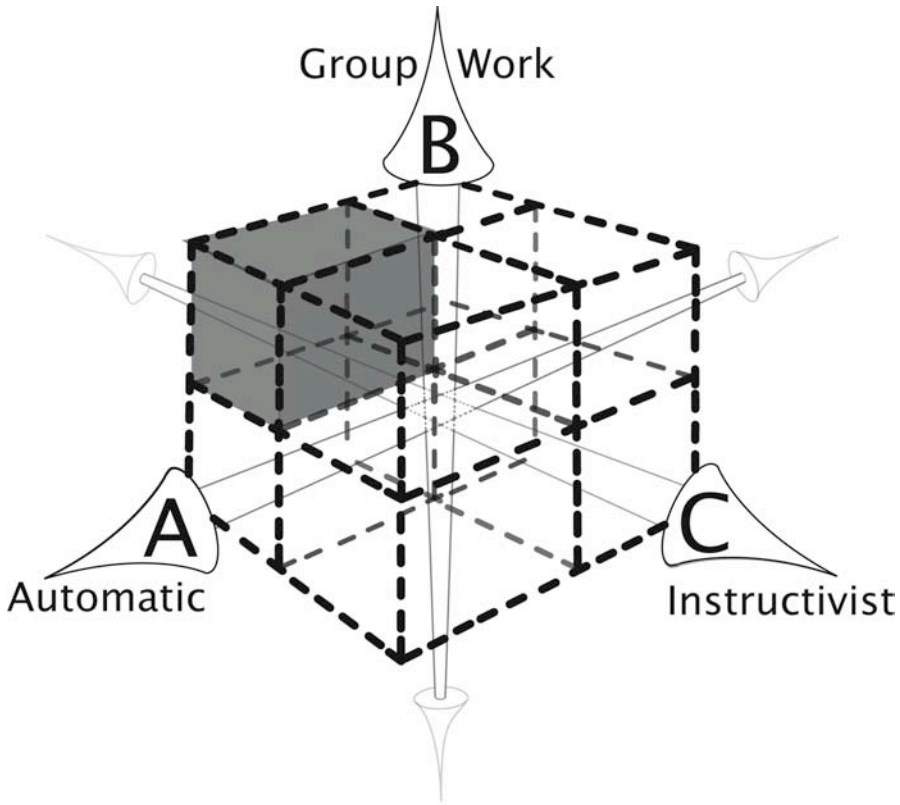

Figure 2.12. An e-learning event, as plotted on the Map of E-Learning.

Therefore, as seen in Fig. 2.12, the grey shaded box represents the e-learning event. Note the approximation in the plotting of the e-learning event. The gray shaded box spans two stations

along each of the three axes. This is indicative of both the possible range of interpretations of the components under consideration, and the limitations of the descriptive stations that are in use. In other words, the plotting of an e-learning event is not a mathematical process. Rather, the use of the Map of E-Learning is as a tool that provides an initial understanding of the kind of e-learning event under investigation. In keeping with the use of the compass and map as a metaphor for guidance through the terrain of e-learning, the conceptual framework and the Map of E-learning are simply tools. They are helpful aids in the investigation of events of e-learning; they provide insight into the direction we might travel to achieve a complex understanding of an inherently complicated landscape. Full and rich understanding of these e-learning events is not possible, however, until one physically interacts with them. In the same way, a map cannot provide the same sense of a landscape's look and feel as a personal encounter with that space can. However, it certainly provides a great deal of information that helps us know what we can expect.

CHAPTER THREE

Methodology

Introduction

The methodology of educational criticism (Eisner, 1991) has been selected to provide an answer to the primary research question: What do educational events, such as classroom lectures, small group work, student discourse, art making, and teacher-student discourse, look like when post-secondary art appreciation is taught online? Educational criticism best answers this question because it brings all of the many subtle details of e-learning experiences to light in a way that allows others to see the qualities of these educational phenomena. Educational criticism provides the tools necessary to recreate, interpret, and evaluate an educational event so that those who were not present at its occurrence might understand it. Such understanding of e-learning events is crucial at this point in the early twenty-first century so that we can build more effective online distance learning experiences for tomorrow's students.

I claim educational criticism as the methodology to best answer this primary research question because it consistently uses the work of art as the analogue for the act of teaching. The products of this artistic work in this study are the e-learning events investigated. Therefore, an accurate portrayal and meaningful evaluation of e-learning events is the careful examination of the process of teaching that brings those events to life. For this study, the teaching was my own.

Since the e-learning experiences under investigation in this study are the fruits of my own teaching, they provide the ideal subjects of investigation through the methodology of teacher-research (Cole & Knowles, 2000). Teacher-research best answers the secondary research question: What is the impact of the use of e-learning upon my art appreciation teaching practice?

Teacher-research can be considered as a tool for the enhancement of one's teaching. The methodology provides a way of answering this secondary research question as I investigate the implications e-learning holds for my own teaching practice in the more traditional art appreciation classroom.

Because the classroom served as the site of research, a dynamic teaching and learning environment influenced the course of the study. As the study progressed, new research questions emerged. These questions were: What is the nature of my discussion with students when addressing aspects of particular problem that must be solved? When the educational problem centers on the creation of an art object, how does the community of inquiry respond?

In addition to the methodologies, I discuss the methods of this study. Data collection and analysis methods are described, as are the study's human subjects research policies. Before I delve into these methods, however, it is important that I set the stage for the study by describing the art appreciation course that I taught, its educational objectives and goals, the participants, and the teaching tools utilized. Each of these major players in the study has profound roles to play in the selection of the methodologies of educational criticism and teacher-research and the study's methods of investigation. It is for that reason that we turn to them first.

The Site of Inquiry

Art Appreciation

Course description.

The art appreciation course that served as the site for this study is ARTS 2000, a course officially titled Art Appreciation. This course is open to all students in the University. Enrollment is limited to 130 students. The eighth edition of *Artforms* (Preble, Preble, & Frank,

2002), which is in its eighth edition at the time of this writing, is the adopted text. A large lecture hall, located in the Visual Art Building of the Lamar Dodd School of Art at the University of Georgia, is the location of the class.

For this study, I investigated one section of the Art Appreciation course, where I was the teacher of record. I taught this class in the summer of 2004 as a short session course. The class began on June 10, and ended on July 8, 2004. During this intensive month, the class met from 2:15 to 4:30 pm every day. Because it was a summer course, enrollment was smaller than usual. There were 83 students in the section. A Graduate Teaching Assistant (GTA) was assigned to the course. She, too, was an art education graduate student, and would prove to play an essential role in the hybrid class. There were several occasions that she conducted lecture hall discussions while I went to the computer lab to conduct online discussions during our synchronous class meetings.

Because the ARTS 2000 course is open to the entire University community, these students were, more often than not, non-art majors. Additionally, most students took the course because it fulfilled a degree requirement. All undergraduate degrees offered at the University of Georgia require students to take six semester-hours in fine arts and humanities as part of the core curriculum. ARTS 2000 is one 3-hour course that is available to partially fulfill this requirement. In other words, many students were not in the class because they wanted to be, but partially because they had to be.

Course aim, goal, and educational objectives.

With these course features in mind, I devised an aim, goal, and three educational objectives for the class. These major educational features of the class guided me in designing the curriculum and corresponding learning experiences. The aim for my art appreciation course was

that students would be able to grasp the interconnectedness of art, aesthetics, and culture (Neperud & Krug, 1995). I define art appreciation as *the understanding of the aesthetic justifications for the reasons that people enjoy art.* The enjoyment I refer to here is the intellectual and emotional enjoyment people can find as they respond to and find personal relevance in works of art. I believe that the emphasis in this definition of art appreciation upon the *aesthetic justifications* for the reasons that people enjoy art connotes the multivocality present in today's art world. An understanding of these multiple aesthetic justifications requires a contextually derived consideration of what is good in art. Furthermore, by encouraging my students to move beyond the perception-halting statements of like or dislike, I wanted them to be able to develop a better understanding of the reasons different people enjoy different kinds of art.

A goal, unlike an aim, is a more localized expression of instructional intent. For example, if my unit of instruction has as its aim to explore the use of the Internet as a life-shaping medium, then the goal would be to foster a deeper understanding of the self and others living in "The Global Village" using art. In this goal statement, the all-encompassing concept of the Internet and its role in human experience (which is so broad that it might be the aim of any discipline) has been narrowed to the more focused goal of exploration of self, others, and art in the electronic age. The goal for the course was that students study culture and the role art plays in it, and vice versa, through an investigation of the wide range of aesthetic stances that enable us to make meaning in everyday visual communication.

Finally, three student-centered objectives to pursue in the art appreciation class were developed. These objectives helped define what was essential for the students to know and to do. To provide the students with the means to accomplish the objectives, it became necessary to establish a learning environment where students could solve real-world problems. These

problems were framed within a variety of the many contemporary art education theories, pulling from the best aspects of each of them in an *eclectic* approach (see Efland, 1995).

First, I wanted students in the course to make informed decisions about artistic expressions they saw on a daily basis by supporting those decisions with valid reasons. Second, students in the course were to be able to synthesize their experience of the art around them with the context of those works. McFee writes (1995) about the importance of students understanding their own culture: "Strategies need to be devised to help students analyze the cultural functions of art in maintaining and changing culture. More strategies need to be developed for helping students study their own culture and the role art plays in it" (p. 190). A third objective of the course was that students were to engage in active involvement with art making processes to discover the way that the process of art production allowed personal construction of meaning.

Participants in Inquiry

The Students

As previously mentioned, there were 83 students in the art appreciation class. These students were predominantly non-art majors between the ages of 17 and 24. In terms of their collegiate experience, the students ranged from first-year students to members of the fifth-year class. Two students considered themselves non-traditional students, as they were both returning to college after having been members of the workforce for a considerable time. One of these non-traditional students was auditing the course.

Of greatest importance for this study were the sixteen students selected to comprise an alternative learning group. This study was centered on discovering the nature of selected e-learning events that were brought about through the use of interactive computer technology.

Furthermore, the impact of the use of e-learning in my own art appreciation teaching practice would be investigated. Therefore, it was imperative that I created an alternative learning group who would engage in the class through e-learning, resulting in a hybrid class. The hybrid class, as mentioned in Chapter One, was a mixture of both face-to-face and online learning groups. The two groups would engage in art appreciation studies during the same period of time, but would conduct course activities in different ways. At several points in the semester, they would mingle in synchronous class meetings via interactive computer technologies, specifically Horizon Wimba. I will describe Horizon Wimba, and its role in facilitating hybridized instruction, in a section appearing later in this chapter.

The sixteen students in the online learning group were volunteers drawn from the ranks of the entire class. I selected them on the first day of class according to three selection criteria. First, they had to have access to a computer with a high-speed Internet connection. Students could use their home computer or a computer at their work. Second, the computer the students would use for their class work must have had a Windows-based operating system. More discussion about the rationale for this requirement will be forthcoming in the section about the technologies used in the study. Third, students must have had a copy of some brand of digital graphics software (e.g., Adobe Photoshop) installed on the computer they would be using for the work in the class. More discussion about this requirement is forthcoming in the technology section, as well.

If a student in the class met all three of these criteria s/he was invited to volunteer to be a part of the alternative learning group. I had 22 students sign up initially. These students met with me during the first day of class in the computer lab adjacent to the classroom for a face-to-face orientation session. I demonstrated the computer technologies that the students would use to

participate in the online group activities. The students provided me with their student ID number, so that I could create a Horizon Wimba account for them. Students formed discussion facilitation teams and signed up for a date on which they would be responsible for creating a WebCT bulletin board discussion topic. We discussed the course guidelines, particularly with regard to attendance and participation requirements.

During the course of the next couple of days, six students elected to withdraw from this alternative learning group, leaving me with sixteen students who became the primary participants in this study. They were the subjects who were testing, trying, learning, adapting, and providing feedback and data regarding the nature of these e-learning events I was implementing in my teaching.

Human subjects protection.

Protection of the participants was guaranteed through human subjects study provisions granted by the Institutional Review Board (IRB) at the University of Georgia. All students were made aware of the research on the first day of the course, as I asked them to sign a release form to participate in the study. Participants gave permission to use audio and visual recordings in this research study and in presentation of findings. Confidentiality was guaranteed to protect the identities of all participants, and the names used in this study are pseudonyms. (See Appendix B for human subjects study application and corresponding forms.)

My Role as Teacher/Researcher

Since I was involved with the e-learning events from a teaching standpoint, I was also a participant in the study. My position was that of teacher/researcher (Cochran-Smith & Lytle, 1993). As a teacher, I created the course from the ground up. Using the aim, goal, and educational objectives discussed previously, I designed the curriculum for the course.

Additionally, as the teacher, I brought the curriculum to life through the e-learning experiences used in the study. These teaching tasks, and many others including grading, corresponding with students, etc., were all wrapped up in my identity as the teacher of the course. It is important to note that all of the ideological positions I hold and the theoretical base for my teaching practice form the hub of who I am and what I do in the classroom. These foundational components of my pedagogical identity were a factor in the study, and are an important part of the methodology. I discuss this facet of the methodology in a forthcoming section at greater length.

In addition to my role as the teacher, I was also the researcher in this study. Therefore, I brought another set of lens to the collection and analysis of the data. As the researcher, I scrutinized each event with an eye toward research, in order to gain some perspective on the events. I was interested in chronicling the entire course through involved and detailed methods. These methods provided me with insight into the design and implementation of the e-learning events. My role as researcher was to maintain rich, accurate records of every facet of classroom life. This was accomplished through several avenues, including video journaling and the archives generated using computer technologies such as Horizon Wimba and WebCT. These methods are discussed in detail in the data collection section appearing later in this chapter.

Technological Tools for Inquiry

Horizon Wimba

Several key computer technologies were necessary for the successful completion of this study. The first is a software program called Horizon Wimba (an updated, renamed version of Horizon Live). Horizon Wimba is an application that I used to conduct synchronous class meetings throughout the study. This software provides the participants with two methods of communication. Students and instructors can speak to one another using their voice, or chat with

one another using the keyboard on their computer. Participants can also share PowerPoint slide shows, share web sites, and even share applications on their desktops with everyone in the class.

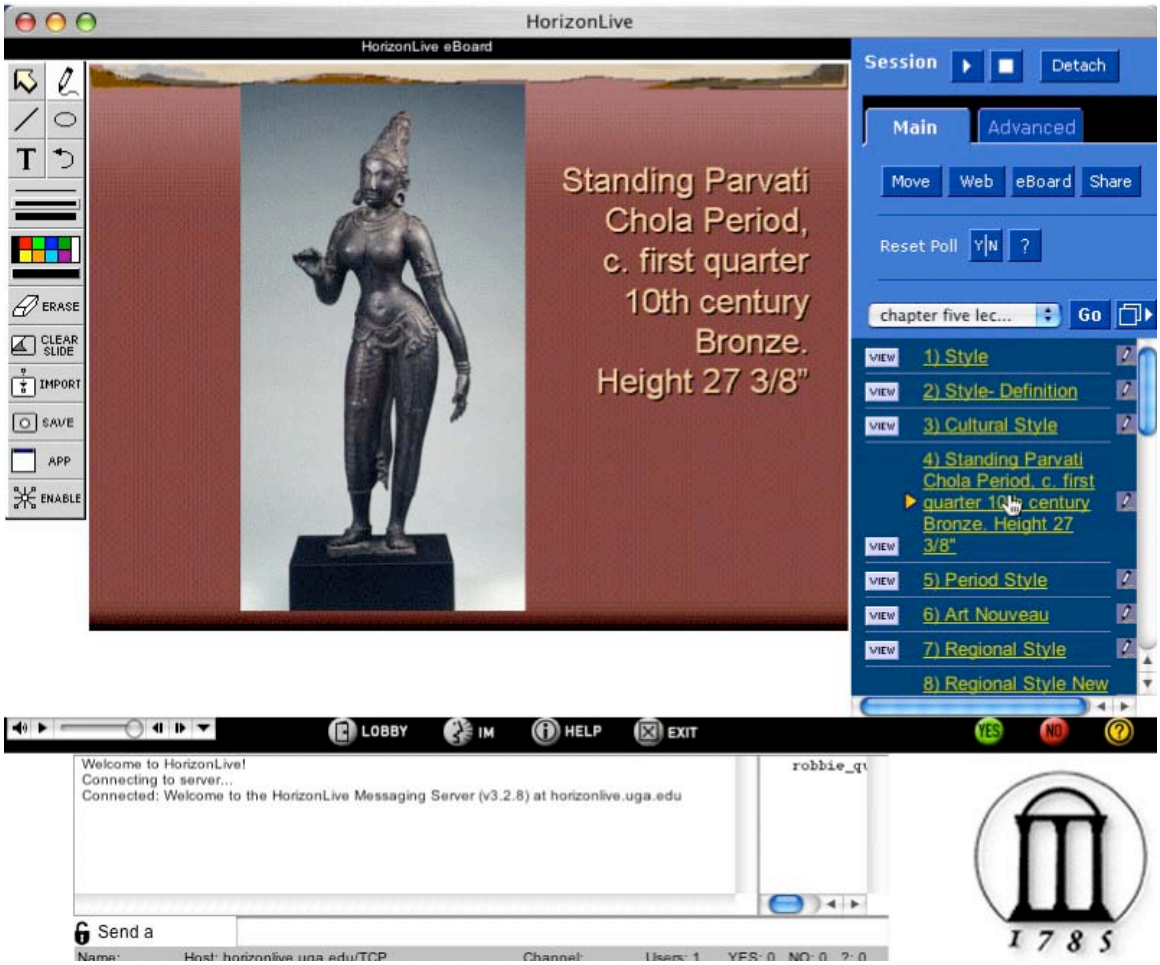

Fig. 3.1. Screenshot of Horizon Wimba interface

At the time of my research, the only version of Horizon Wimba available at the University of Georgia was the one-way audio version where students can hear the instructor and can ask questions or chat with one another using text messages. All a student needed to participate in the Horizon Wimba session, then, were speakers and/or headphones and a high-speed Internet connection on his or her computer. Additionally, at the time of the study, Horizon Wimba was compatible only on computers using the Windows operating system. The version of

the software available at the time of this writing is now fully compatible with both Windows and Macintosh.

I limited my use of Horizon Wimba to the PowerPoint sharing feature of the application. I first created a PowerPoint presentation to accompany the material I wanted to cover with the students. Then, I uploaded the PowerPoint presentation to the Horizon Wimba administrator website, which essentially captures a JPEG image of each slide in the presentation. Last, I accessed the slide images using the Horizon Wimba interface as shown in Figure 3.1. This final step in the process is "pushing" a slide, which means that the slide is shown to the online participants. An instructor can also push a website for students to view. I occasionally annotated the slides with text and objects such as arrows, lines, and circles. Additionally, of course, students were able to hear me speak about lecture content. In this study, the use of Horizon Wimba was essential so that all of the students could view the works of art I was discussing with them at the same time via the Internet.

Horizon Wimba was also a powerful tool for data collection in this study. The program provides an archiving feature, which captures all text messages sent by users in the context of the displayed slides, and the audio feed submitted by the instructor. The intention of this capability is that students could access a certain archived lecture at any time. However, I utilized this feature to have an accurate documentation of the way the lectures unfolded. This is extremely important for this study, as one of the e-learning events I have selected to investigate is the online lecture. I provide more details about the way I utilized Horizon Wimba as a data collection tool later in this chapter.

WebCT

Another aspect of computer technology I utilized in this study is WebCT (version 3.8), the course management system used to create and maintain an online learning environment (OLE). An OLE, such as WebCT, is conducive to supporting quality learning by providing an instructor and students with a centralized online location to post and access course content and discussion boards at all times from anywhere (Clark, 2002). As seen in Figure 3.2, the WebCT site for the Art Appreciation course is a simple combination of easily navigated images and texts. WebCT has both chat room and whiteboarding functions that teachers and students may use for synchronous contact. I utilized the chat rooms on occasion for small group discussions. There are five chat rooms available for use on WebCT, four of which are automatically archived and easily accessed by a teacher or administrator. I have archives of each of these four chat rooms that catalog all of the chat room activity throughout the course. This source of data provides rich information for the analysis of student discourse that occurred during this kind of e-learning event.

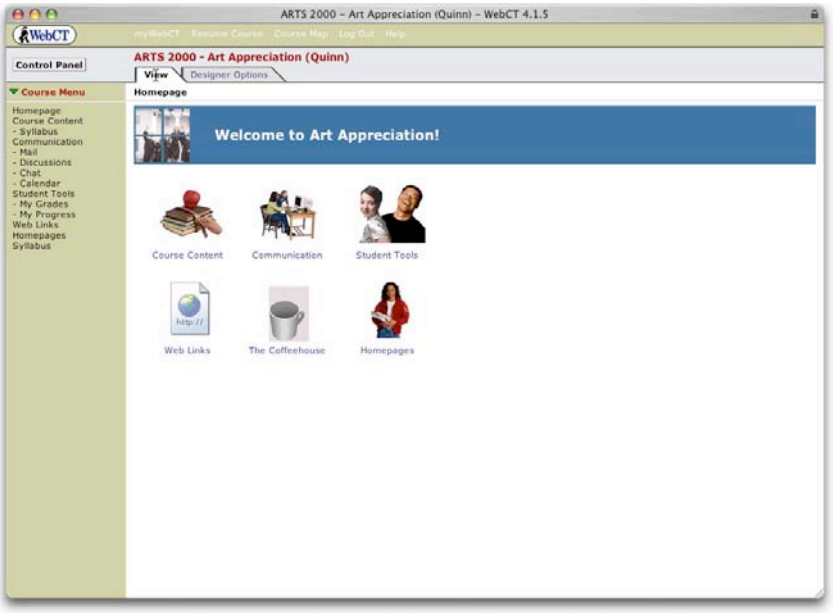

Fig. 3.2. Screenshot of the WebCT site I designed for the Art Appreciation course.

Additionally, the course WebCT site formed the hub of most of the interaction between the students and myself. Course content was placed on this site, including the syllabus, assignment information, readings, and schedule information. Students used the WebCT site to conduct their asynchronous discussions using the "Bulletin Board" feature of the WebCT site. Students also created and maintained personal homepages through the WebCT site. It was on these homepages that students posted personal items of interest and several required items. One of these items was the digital artwork they created as a part of the coursework.

Computer Graphics Software

The third essential technology needed for this study assisted students in making digital artworks. Digital graphics software applications, such as Adobe Photoshop, provided students with the tools they needed to create two digital artworks. This particular computer program is a type of digital imaging software for artists, photographers, and designers. Photoshop is an extremely versatile program that can be very complicated to use. I instructed students in the very basic techniques for using Adobe Photoshop to create digital files for the coursework. This instruction occurred on the very first day of class, during which time the students in the alternative learning group met face-to-face with me in the classroom to discuss the ways they would be using these three pieces of computer technology for their coursework.

In this section, the site of inquiry for this study has been presented, the course described, and its major educational objectives articulated, providing a foundation for the structure of the course. The selection of the participants has been documented and my role as teacher/researcher presented. An overview of the three major pieces of computer technology used in the study was provided. In the following section, I elaborate on the reasons educational criticism and teacher-research were chosen as the methodology for this study.

Selection of Methodology

Traditional Research Methodologies

Researchers have approached investigations into the nature of e-learning through a variety of methodologies. Some researchers (Johnson, 2002; Maki, Maki, Patterson, & Whittaker, 2000) have used a pre-test, post-test quasi-experimental design approach that compares two or more sections of the same course. One section would occur in a traditional classroom while the other section would occur in an online classroom. Both classes participated in similar activities and completed similar assignments. Tests were administered to measure student knowledge, both at the beginning of the course and at the end. Investigators would use attitudinal instruments in order to get a clearer picture of the students' attitudes toward the subject matter, modes of learning, use of computers, and experiences in the various learning environments.

Research studies using this design have produced widely varied results. Some studies (Johnson, 2002; Lockard, 2001; Maki, Maki, Patterson, & Whittaker, 2000) have concluded that there is a statistically significant difference between the educational experiences and testing results of the experimental and the control groups. Sometimes, the statistically significant difference favored online distance learning; sometimes it did not. Other studies (Gagne & Shepherd, 2001; Johnson, Aragon, Shaik, & Palma-Rivas, 2000) reached the opposite summation, that there is *no* significant difference between the two groups of learners.

The discrepancy of the findings of these studies is troubling. Even though such results provide support for e-learning advocates who claim that e-learning courses are as effective as the traditional courses they replace, some online educators (Thompson, 1999; Twigg, 2001) are making a call for courses that go beyond the *no significant difference phenomenon* (Russell,

1999). Real innovation can only occur when we begin to think about things as they never were (Twigg, 2001). These theorists and educators maintain that innovation in online course design avoids the repackaging of old pedagogical techniques in new media. Instead, the nature of online learning and the use of interactive computer technology in education require a completely different method of teaching.

Therefore, this study departs from the previous investigations I have described in theory and basic design. I did *not* implement a quasi-experimental design to create a control group and an experimental group; nor, did I later compare these groups. I had two different learning groups; however, I did not measure them according to a manipulated variable. I did not evaluate them this way because they were not the same. They cannot be.

Instead, I investigated the nature of e-learning events in post-secondary art appreciation. I was also examining the way the activities of the online group informed the pedagogical techniques implemented in the traditional classroom, and vice versa. I was interested in discovering how the nature of teaching changes because of the ways of knowing and making meaning engendered by the use of interactive computer technologies in online art appreciation. I was interested in discovering ways that an e-learning course in art appreciation inspired teaching that is *much better than* my current pedagogical practice. In the context of art appreciation, I wanted to better the way I engage students in personally relevant responses to works of art. By carefully investigating the manner in which students intellectually and emotionally grapple with challenging scenarios of visual art through online learning, I may be able to suggest ways that the research findings provide impetus for the field of art education in the design of learning and teaching experiences that encourage students to understand the aesthetic justifications for different individuals' enjoyment of a broad range of art.

This research study also goes beyond previous studies in that I employed the arts-based educational research methodology of educational criticism in an effort to clearly discover the nature of e-learning events and the pedagogy that made those e-learning events possible.

Educational Criticism

Educational criticism (Eisner, 1991) is a form of educational inquiry that calls for the researcher to take careful note of the essential qualities that can be perceived in an educational setting, as a connoisseur appreciates a fine wine, cigar, or work of art. This attentive appreciation, which Eisner calls educational connoisseurship, is only the first step in educational criticism. The researcher must then translate the experience he or she has had with the setting through expressive, contextualized and vernacular language as an art critic might by describing, interpreting, evaluating, and thematically linking what has been seen, heard, and felt (Barone & Eisner, 1997).

Eisner (1998) describes educational criticism as the methodology through which an educational connoisseur translates his or her own private appreciation of the educational phenomenon under investigation into an educative disclosure of the experience he or she has had with that phenomenon. The educational critic must disclose his or her work to the public to be of any social usefulness. Eisner (1998) concedes that this is difficult work, for the essence of the task is a mysterious one: "to transform the qualities of a…classroom or school, or act of teaching and learning into a public form that illuminates, interprets, and appraises the qualities that have been experienced" (p. 86). For this subjective act to be effective, the educational criticism proceeds according to four dimensions: description, interpretation, evaluation, and thematics.

Description is the dimension of educational criticism used to provide a reader with a rich understanding of the subject of inquiry through visualization and emotion. This "seeing" and

"feeling" of an educational phenomenon immediately connects the reader to a real-world event or place, so that he or she might vicariously experience it. *Interpretation*, often intertwined with description, is the second dimension of educational criticism. Interpretation is the process through which an educational critic makes an account for the events or places described. The critic seeks to explain why events happened and what importance they have in the context in which they occurred. *Evaluation* is the third dimension of educational criticism that mandates the appraisal of the educational phenomenon under investigation. The educational critic must make a value judgment regarding the state of the experience he or she is criticizing. Finally, the fourth dimension of educational criticism is *Thematics*. In this process, the educational critic is formulating themes by calling the reader's attention to recurring messages and dominant features of the educational phenomenon. Often, the researcher identifies these themes in some way, commonly by giving the theme a name. This labeling allows others to recognize the themes in other educational situations like those under investigation.

Educational Criticism as Arts-Based Educational Research

As educational criticism is so closely drawn from the practice of artistic criticism (see, e.g. Barrett, 1999; Feldman, 1967) itself, it is artistically oriented qualitative research and evaluation. Another phrase used to describe this artistic approach to educational research is "arts-based educational research" (Barone & Eisner, 1997), or ABER. ABER calls for research methodologies and presentations of research findings to be artistically framed, so that the ways of knowing the world that exist in and through the arts might shed some light upon the subject of investigation. Additionally, arts-based research into educational phenomena should actively employ the sensibilities of artists to get a clearer picture of the situation. Perhaps most central to

ABER is the explicit use of aesthetic qualities in both the inquiry itself and the presentation of the research, often through forms of written prose and sometimes through poetry (Cahnmann, 2003).

Many approaches to arts-based educational research provide rich ways to gain insight into issues of educational inquiry. In conducting this study, I was interested in discovering the nature of selected e-learning events. I wanted to be able to describe what they looked like as they unfolded in real educational practice. Furthermore, it was my desire to interpret why these e-learning events occurred the ways they occurred. I also wished to make value judgments about the results of these e-learning events through careful and considered evaluation. Finally, I wanted to be able to draw out the persistent and pervasive themes seen in my experiences with these e-learning events. In so doing, I am able to provide others with a sense of the things they can look for in their own experiences with e-learning.

Educational Self-Criticism

Typically, the use of educational criticism is for the observation of classroom practice by someone other than the subject of the investigation. In this study, educational criticism was the methodology I used to turn the investigation upon myself. In so doing, I essentially utilized the methodology as an artist might utilize a self-critique. The process of conducting a self-critique in the arts is an introspective one. It is the act of carefully reflecting on one's own artistic purposes in the creation of a work of art, and the honest and forthcoming appraisal of the work of art to determine if it aligns with those purposes. These aims of the self-critique can be examined in relation to the dual aims of what I call *educational self-criticism*.

This study examined selected e-learning events through the framework described in Chapter Two and the methodology of educational criticism in an effort to illuminate the many

important facets of those e-learning events. The e-learning events were considered to be works of art, becoming the focus of the primary research aim. These works of art were acts of teaching. They were artistic products; fruits of the teaching process by which I imagined, planned, and executed e-learning events in the virtual classroom.

I also reflected upon the means by which I created and conducted these e-learning events in the online post-secondary art appreciation classroom. To further draw on the metaphor of the self-critique, I directed my efforts to a secondary research aim. This aim was an evaluation of the *process* through which the works of art came into being. I evaluated effective pedagogical techniques that contributed to the students' experiences, outcomes, and understanding of art appreciation. In turn, these reflections informed my own perceptions and educational practices in the traditional classroom, from which I draw the secondary research question for this study.

Therefore, the process of educational self-criticism is a cyclical one. As one evaluates the process and the results of one's own teaching, strengths and weaknesses can be identified and future practice can be changed accordingly. The altered practice provides new work to appraise through the methodology. This process of cyclical betterment of my teaching practice is the sole reason that I selected my own classroom at the site for this study. It was my desire to provide first-hand experience with events of e-learning, as a teacher-researcher, so that I might improve my future pedagogical practice in the realm of online art appreciation for the post-secondary classroom. In Chapter Seven, I extend some of the implications of these strategies into art education practice for the traditional art appreciation classroom, and art education in general.

In the next section, I elaborate on the justification for investigation into my teaching practice as a teacher-researcher. I begin by describing the methodology of teacher-research, in general and discussed my role as a teacher-researcher. Then, I discuss how my experience as a

teacher provided a unique vantage point for the investigation of the e-learning experiences made possible in the classroom. Furthermore, it was my teaching experience, I will argue, that granted me the insight into the classroom necessary for the exercise of educational connoisseurship and criticism.

Justification of Self as Researcher

Teacher-Research

As the focus of this research was pedagogy, techniques of teacher-research were used to gain insight into my teaching practice as it related to the nature of the e-learning events under investigation in this study. Teacher-research may be thought of as a way to study and enhance one's teaching (May, 1997). The efforts of a teacher-researcher are aimed at looking carefully at one's teaching practice in order to develop that practice more fully. A more socially critical rendering of teacher-research mandates that such introspection be reframed into an awareness of the power structures evident in school and classroom practice and how the teacher-researcher has something to contribute to the research on education. Such an approach to research is often called *action research* (Kincheloe, 2003). In this context, teacher-research is seen through the perspective of teachers who are learners. "Teachers are seen as researchers and knowledge workers who reflect on their professional needs and current understandings" (Kincheloe, 2003, p. 18).

Such an emphasis upon critical reflection is explicit in the work of teacher-research as a doorway to effecting change in a teacher's practice. The learning process taking place in a teacher's classroom is the starting point for all techniques of teacher-research. Teachers should be using teacher-research to constantly question their everyday activities in the classroom and to

objectively look at their preconceptions and assumptions about teaching and learning. The interconnectedness of theory and practice in teacher-research sets up the interplay between theory formation, reflective implementation, and revision. This interplay is the same as the cyclical process of educational self-criticism described in the previous section.

My Experience as Teacher

Through teacher-research techniques, I objectively examined my pedagogical strategies as I evaluated and revised the theories informing those strategies. My efforts were aimed at careful consideration of art appreciation teaching practices in order to contemplate my own traditions of instruction and assumptions about the learning process taking place in the post-secondary art appreciation classroom. Of particular importance was the way that I used teacher-research methods to evaluate electronic pedagogy in order to inform traditional teaching in post-secondary art appreciation. Specifically, as prompted by Taylor (2002), I wanted to investigate how my teaching practice was changed as a result of interactive computer technology in online learning.

The information gleaned from teacher-research in this study was of direct benefit and immediately put into action. This process was possible because of the way this study was established with two learning groups. One was, essentially, a traditional learning group that participated in learning activities in a face-to-face, physical classroom. The other learning group was what I referred to as an alternative, or online learning, group that participated in atypical learning experiences in an online classroom. During this study, I taught both groups during the same period of time. As I taught one group, I reflected on that teaching and implemented it when I taught the other group, and vice versa.

Through this kind of reflective teaching (one important technique of teacher-research) insight into my decision-making processes can be seen and an understanding of myself as a teacher can be fostered (Cole & Knowles, 2000). Reflection occurs as teachers talk and write about their hypotheses and the subsequent tests of their ideas regarding teaching. These reflections not only provide a first-hand account of a teacher conducting research, but help to provide "data about classroom life that can be used…to construct and reconstruct theories of teaching and learning" (Cochran-Smith & Lytle, 1993, p. 20). Typically, this process of reflective teaching utilizes a written teaching journal, in which a teacher writes his or her reflections of teaching practice (Connelly & Clandinin, 1988). For this study, I utilized a video journal, which is discussed in the data collection section of this chapter.

Since this work of educational self-criticism and teacher-research pulled from my in-depth knowledge and experience of the e-learning events, the richness of description, accuracy of interpretation, validity of evaluation, and development of thematics require that I establish my educational connoisseurship. I do so by drawing attention to my expertise in teaching. I have been a teacher of art, both at the secondary and post-secondary levels, for ten years. Throughout the time that I have been a teacher, I have been responsible for making important decisions regarding curriculum, pedagogy, and assessment. I also have experience in evaluating others' teaching. As a teacher of methods courses for pre-service teachers and as a supervisor of student teachers in art education, I have had to critique many events of classroom teaching. It has been my practice to articulate my recommendations for improvement after having carefully observed my students' professional experiences in the art classroom.

I argue that because of this expertise in conducting and evaluating teaching activities, I was able to make fine-grained distinctions in the events of teaching and learning in the online

classroom. As an experienced teacher, I possess the complex knowledge Kincheloe (2003) calls *teacher knowledge*. Teacher knowledge revolves around "the creativity of *one* child, the 'feel' of a child's anger or affection, [or] the ambiance of a classroom full of students captivated by a lesson" (p. 83). Connelly & Clandinin (1988) refer to this insight as *personal practical knowledge*, which emphasizes the teacher's knowing of a classroom.

Additionally, in drawing out those fine-grained distinctions in e-learning events I called upon the knowledge I possess in the area of educational theory. My professional training has been centered on art educational theory throughout my undergraduate and graduate education. I possess a B.S. Ed. and a M.Ed. in art education, and have completed comprehensive coursework in partial fulfillment of a Ph. D. in art education. By drawing on this knowledge of educational theory and the previously mentioned knowledge of teaching, I am equipped to engage in educational connoisseurship. Eisner (1998) puts it this way: "The kind of knowledge relevant to the observation of classrooms derives from general knowledge about educational theory *and* classroom-specific knowledge" (Eisner, 1998, p. 66).

In this section, I have attempted to defend my rationale for choosing my own teaching practice as the subject of inquiry for this study. I have done so by drawing evidence for the exercise of educational self-criticism from the field of teacher-research and by citing reasons that my experience as a teacher justifies my work as an educational connoisseur. There are still other sources of evidence that are necessary for the establishment of credibility when it comes to the use of educational connoisseurship and criticism. These sources of evidence are three concepts Eisner (1998) calls structural corroboration, referential adequacy, and consensual validation. In the final section of this chapter, each of these three concepts is discussed as it pertains to the work of educational criticism and the establishment of credibility and validity for this study.

In the next section, I discuss the methods of gathering and analyzing the data used in this study. In so doing, I describe the process by which I attended to each of the four dimensions of educational criticism: description, interpretation, evaluation, and thematics.

Description of Methods

Data Collection

As discussed above, I employed a methodology of educational criticism to answer the primary research question and teacher-research to answer the secondary research question. In this section, I describe the way that these methodologies informed the process of data collection by describing the particular sources of data and the techniques used to collect those data. Specifically, I describe the use of video journaling as a technique for teacher-research, the utilization of data from selected computer technologies, and the collection of teaching and learning materials used in the course itself.

Video Journaling

Videotaping is a method of collecting rich data about a research participant and his or her recollections of research events. By collecting both video and audio information, the video camera provides visual clues that accompany verbal statements. In that way, the researcher has a much broader sense of the recorded communication. While videotape interviews have been a staple of much latter-twentieth century ethnographic fieldwork, turning the video camera upon one's self provides a unique perspective.

The video camera was a necessary piece of recording equipment, particularly since I was interested in the visual "feel" of the e-learning events being investigatied in this study. I utilized the video camera, a Canon ZR80, in several ways. First, and primarily, I used the camera to

record my thoughts, feelings, and impressions of the events of the study. Specifically, I recorded seven videotaped self-reflections throughout the study. During these video journal self-reflections, I considered aspects of the study such as syllabus construction, course website design, and classroom events. The resultant video journal entries provide the basis for a coherent recollection of my perceptions and the practices implemented in the research.

The video journal entries were very spontaneous, as everything recorded was extemporaneous. Based on my educational connoisseurship, I made instinctive decisions to attend to selected aspects of the study. On the seven days I recorded these video journal entries, I attempted to carefully render what I considered to be the important occurrences of my teaching. In the same way that a photographer utilizes an instinctive "hunch" to decide when s/he will take a picture, I allowed my well-developed sensitivity, or *personal practical knowledge* (Connelly & Clandinin, 1988), of the important events of teaching and learning to dictate when I recorded a video journal entry.

Typically, I simply turned the video camera on, set it up on a table or counter top in front of me, turned the camera around so that its lens was facing me, and flipped the panel monitor around so that I could see exactly what the camera was capturing. The only planning I did for the video journal entries was to ensure that I was aiming the camera at my face. To achieve good audio quality in the video recordings, I kept the video camera positioned close to my face, making it very easy to see my facial expressions as I talked. Someone watching the video could sense when I am puzzled about the things I am speaking of or when I relived a pleasant experience from the study. In Figure 3.3, you can see a captured image from one of these video journal entries.

In this segment of the video journal entry, I am describing my feelings regarding the realization that I had been making a mistake in the way I was using Horizon Wimba for the discussion of artworks with the online group. I captured the still seen in Fig. 3.3 when I said, "Oooohhh, I just feel awful! It makes me realize the importance…of…more specific…modifiers." This image reminds me how disgusted I was about this realization. I closed my eyes in disbelief as my brow furrows slightly in anger.

Fig. 3.3. Captured still from video journal entry.

By using a digital video editing software application (iMovie HD available on Macintosh computers), I was able to view the video journal entries in slow motion, and could stop the videotape at any point in time to view detailed segments like the one described above. Additionally, I was able to import the video into the iMovie HD program for editing and other manipulation, such as capturing individual segments and still frames, like that seen in Fig. 3.3.

I videotaped seven journal entries in the period from May 18 to June 28, 2004. This period coincided with the planning and near-completion of my teaching the art appreciation course that served as the site for this study. These are the dates of the videotaped journal entries: May 18, June 6, June 10, June 14, June 20, June 25, and June 28. The video journal entries were just one way that I collected data for this study. I gathered data using selected computer technologies, which I discuss in the following section.

Computer Technologies Used in Data Collection

Horizon Wimba.

In a previous section in this chapter, I discussed the use of Horizon Wimba as one kind of computer technology utilized for inquiry in this study. Horizon Wimba made data collection possible in that it archived the online lectures conducted with the online group. As part of the data collection for this study, I downloaded the archived Horizon Wimba sessions to my computer's hard drive. Each of these downloaded archives contains an audio file of my recorded voice as I conducted each online lecture. I have an archived audio file saved on my computer's hard drive for the lectures conducted on the following dates: June 14, June 17, June 24, June 28, and July 1. Because of an unresolved technical error with the Horizon Wimba administration site, I was unable to create an archive of the online lecture I conducted on June 21, 2004.

To utilize the full archiving capabilities of Horizon Wimba, however, I was able to access the administration area of the Horizon Wimba website. At this location, I could login with a username and password at any time to experience the full audio and video version of the archived lecture. Via an interactive interface, I could listen to the archived audio, view the PowerPoint slides I discussed in the lecture, and watch the text messages my students and I wrote to one another in the text chat during the lecture.

The archive is a Java applet, which coordinates the text messages that appear, the slides that are visible, and the audio file that plays. The interface, as seen in Figure 3.4, consists of two separate windows. The window on the left shows the PowerPoint slides and the text messages in

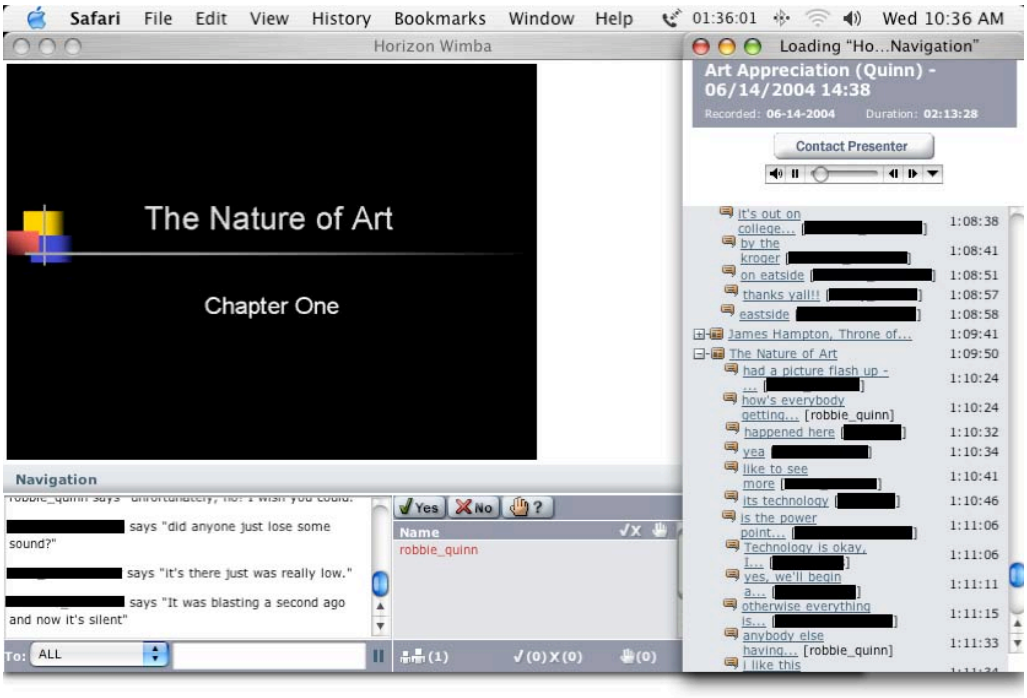

Fig. 3.4. Screenshot of the Horizon Wimba archive-viewing interface.

the format typically seen by the students, where the session participants' names are visible. The window on the right displays a list of the comments made during the archived lecture, in reference to the title of the slides used in the lecture. The author's name and the time at which the student submitted the comment accompany each comment. In the window on the right, I can click on any of the underlined submitted comments to jump to the place in the lecture corresponding to that comment. The Java applet loads the appropriate PowerPoint slide and moves the playback of the audio file to the right moment in the lecture. In that way, the archive provides a helpful way of reliving the e-learning event.

WebCT.

WebCT was an additional type of computer technology that provided me with tools for conducting some of the e-learning events under investigation in this study. In terms of providing rich data about those e-learning events, WebCT proved to be very valuable, making several aspects of data collection possible. First, WebCT was used to generate an archive of the entire course website, allowing me to be able to keep track of important student data via the WebCT site. As the administrator for the site, I had access to the student management area, which included important information such as the amount of times students had logged onto the course site and viewed certain web pages. I could also monitor how many messages students had posted and read on the course bulletin board area (see Figure 3.5). With just a brief look, I could keep up with the level of involvement my students were having with the course as indicated by the frequency and sheer number of their WebCT activity.

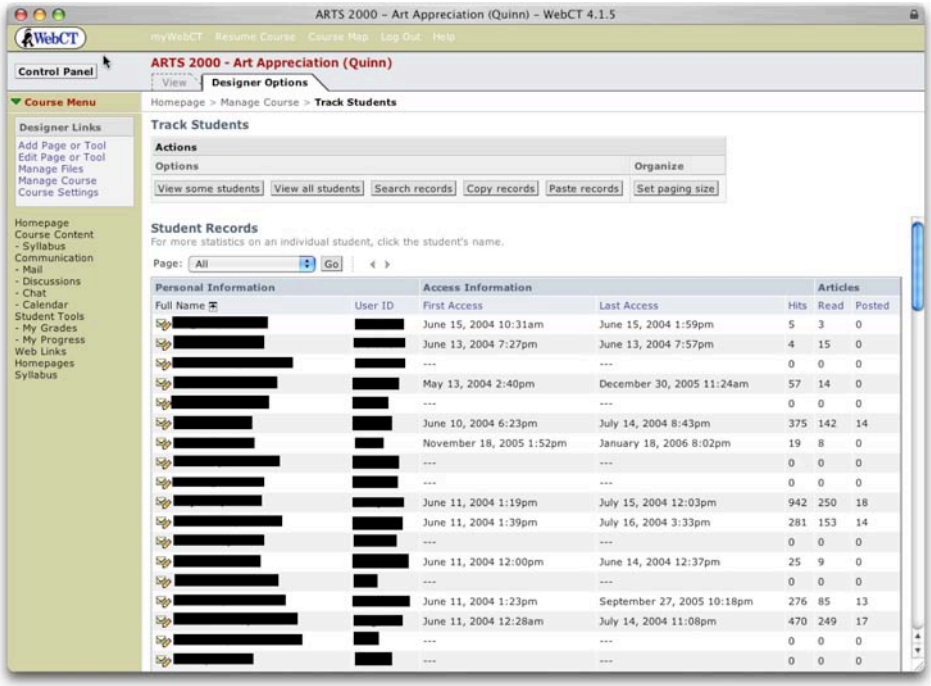

Fig. 3.5. Screenshot of the student management area of the WebCT course website.

The bulletin board area is also an important source of data as it chronicles the course of conversation about given topics. Not only is the content of the bulletin board messages archived, but the time and date of each message is, as well. One can view the messages in two ways: threaded or unthreaded. The threaded discussion view provides a detailed look at the flow of conversation as evidenced by the posted messages and the order of their submission (see Figure 3.6), listing the author's name, and the date and time of submission. The unthreaded view provides a chronological listing of the messages submitted for each topic, as well as the author's name and the time and date that the message was posted.

In addition to the bulletin board area, the chat room area of the WebCT site provided data about student discourse. I utilized the WebCT chat room on several occasions throughout the study as a venue where students could have real-time conversations about given topics during class time. The WebCT courseware automatically archives four of the six chat rooms on the

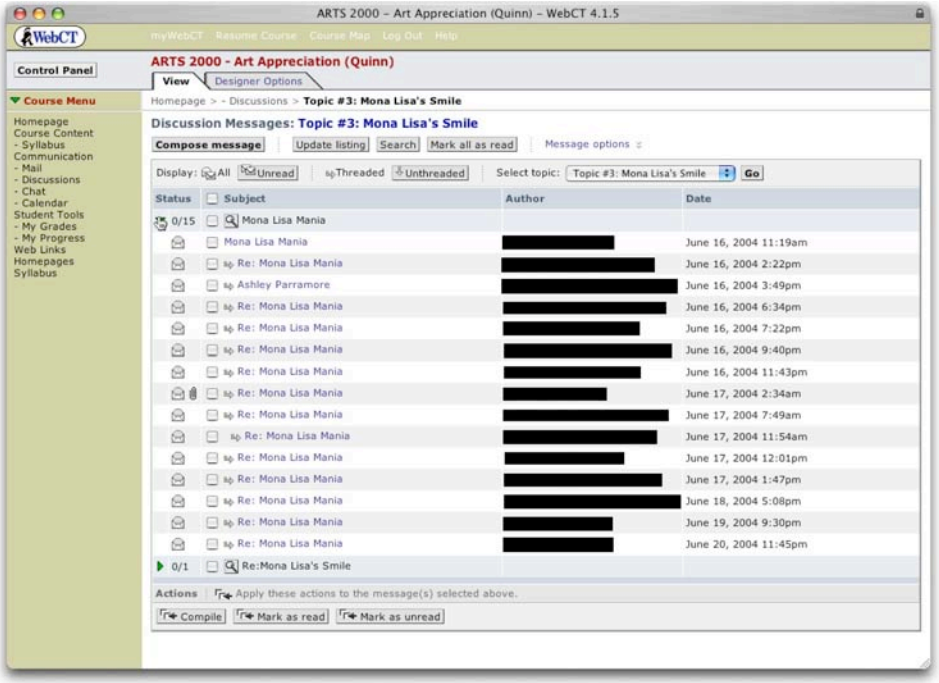

Fig. 3.6. Screenshot of WebCT Bulletin Board discussion in threaded view.

WebCT site throughout the duration of the course. The transcripts of the students' chats could be downloaded onto my computer's hard drive, and provide the content of the chat sessions as well as the names of the authors of every submission. WebCT also archives the dates and times of major chat room activity. For example, the chat room archive displays the times and dates that the participants participated in any chat room activity. This feature is helpful for indicating when students are present, but inactive.

One final feature of the WebCT site was also used for collecting data: the Mail feature. The Mail feature provides a way to send and receive e-mail through the WebCT site. All of the e-mails that I sent to the research participants, as well as their e-mails to me, were archived in my WebCT Mailbox. I can access these e-mails at any time to view the content of the message, in addition to the date and time of transmission. Additionally, the Mailbox lists the name of the e-mail's author.

Paper sources of data.

Not only were technological innovations such as videotaping and computer technologies utilized for data collection in this study, but I also collected paper-based materials as data. All were teaching and learning devices in some form, and provided evidence of some of the results of the e-learning events I investigated. For example, I downloaded written works such as papers from the course WebCT site or from e-mails the students sent me, and printed those out from my computer. In the same manner, I printed copies of student artworks made in the course.

In the following section, the way in which I analyzed this data is discussed. Specifically, I address the way that I attended to each of the four dimensions of educational criticism in the analysis of the data. In so doing, I elaborate on the way that the process of transforming

educational connoisseurship into educational criticism was conducted. The following section is a very detailed description of that process.

Data Analysis

In the methodology of educational criticism, it is important to transform one's private appreciation of an act of teaching through educational connoisseurship into a publicly educative appraisal of the act of teaching. This is the guiding principle throughout each of the four dimensions of description, interpretation, evaluation, and thematics. Because of this overarching aim, it is necessary to reveal the way in which I worked through the methodology. I do so with the goal of providing insight into the process I underwent to analyze the various data discussed in the previous section of this chapter. Perhaps, in so doing, other teacher-researchers might be able to investigate similar kinds of educational phenomena in their own classrooms.

Description

To richly describe the e-learning events I investigated, it was necessary to complete a process through which I could reimmerse myself in the events themselves. Because there was so much data collected during the study, I devised a method that allowed me to cull through the data in a purposeful way. This process involved six basic steps: view the video journal entries, take notes of key reflection topics, revisit data involving those topics, reimmerse myself in that data, construct stories of my relived experiences, and verify those stories with the research participants. In the following paragraphs, I discuss each of these steps.

View the video journal entries.

The first step in the process was to view the video journal entries I made during the study. I viewed seven video journal entries in this first step. As I watched each one, I entered that point

in time once again. I could remember the feelings I was having, the thoughts that were racing through my mind, and the way the experience of conducting the study was affecting every part of my existence.

The most rewarding aspect of the video journal entries is the visual cues that I could read from my facial expressions. With these visual clues, I was able to reenter the time documented in the video journal entries much more fully than I would have been able to if I had captured the reflections using audiotape alone. For example, the videotaped journal entries allowed me to see the moments in my times of reflection when I smiled at the recall of a pleasant experience in the study. As I watched the video journal entries, I took notes about the key reflection topics I discussed.

Identify key issues.

The second step in my approach to describing the e-learning events involved taking notes while viewing the video journal entries. Initially, I made general notes about the issues I would discuss. These notes would provide me with a table of contents, essentially, to guide me through the extensive videotaped material. Upon completion of this cataloging of the video journal reflections, I took note of the key topics upon which I had reflected. I did this by highlighting those topics that appeared more than once in the notes. I concluded that if I had revisited some topic more than once, it was significant. For example, I continually reflected on the manner in which I was referring to the images I discussed during course lectures. My reflective processes in the video journal entries led me to make a note of the importance of more specific modifiers in an online lecture, which I address in Chapter Four.

In addition, I took note of threads of similar topics that I had discussed in the reflections. These similarities typically centered on some particular aspect of the study. For instance, I

highlighted all of the reflection topics that had to do with my online lecture. The five related reflections on conducting the online lecture provided the motivation for me to look into the events I had discussed.

Organize relevant data.

As I began to look into these events, I embarked upon the third step of this process of description: I organized data involving the topics I highlighted as those that were mentioned several times in my video journal entries. I sorted through the data collected in order to find those pieces that revolved around these topics, which I determined were important since I had frequently addressed them in my video journal entries. I looked in each of the technologically created archives of the WebCT site and the Horizon Wimba archives. Paper sources were also subject to my search as I sought to isolate the data that pertained to the significant topics that emerged as I viewed the video journal entries.

Reimmerse oneself in the data.

Once all of this data was prepared, I began the fourth step of this process, which was to reimmerse myself in that data. In order to saturate myself in the data, I had to provide myself with enough data-driven prompts to enter the study once again. I needed to have full access to the teaching and learning environment. It was important that I utilized the data necessary to relive the experiences I had with my students during the course.

Again, using the example of the online lecture, the reimmersion required that I attend to two different bits of data. I had to first listen to the Horizon Wimba archive of the online lecture sessions. By attending only to the audio collected in the Horizon Wimba archive, I could begin my reimmersion by focusing only on the sounds of the teaching and learning situation. I found it

helpful to make notes of the events of the online lecture and to record my own thoughts as I reimmersed myself. I recorded these notes in a word processing document.

To complete the reimmersion into the online lectures, I also had to reimmerse myself in the Horizon Wimba text chat. I attended solely to the Horizon Wimba text chat that scrolled up the screen in the archive as the audio played. The chat messages provided me with insight into the communication that the online students were having with one another and me. As I viewed the discussion, I took notes in the same manner as I did when I had listened to the audio previously. These notes involved my thoughts about what I remembered and felt during the online lectures. I also tried to place myself in the students' shoes as I imagined what it must have been like for them as they participated in the Horizon Wimba session. Of greatest importance in this fourth step is the completeness of my reentry into the e-learning event under investigation.

Construct stories of relived experience.

In the fifth step of the description process, I attempted to construct rich and illustrative stories of my relived experiences. I brought the understanding I had gained through my reimmersion into the e-learning event to bear in the construction of the story of that experience. The stories are full of interesting and enriching details that enliven the narrative accounts of the e-learning events, as a form of portraiture (Lawrence-Lightfoot & Davis, 1997). I portrayed the characters involved in the stories, as I understood them from the data I had collected about them. Their experiences of learning online were intermingled with my experiences of teaching online in the construction of these stories.

Verify the stories with participants.

Finally, the sixth step of the description process required me to secure verification for the stories. Each of the stories I tell in Chapters Four through Six centers on selected individual

student's experiences with various aspects of e-learning as they encountered the events of the online art appreciation course. The research participants, in turn, have become characters in the stories. My development of those characters was built from their own words, as construed through the multiple forms of data, and from my correspondence with them, both in the first and only face-to-face meeting we had in the class and in the WebCT discussion area. There was also an element of imagination that factored into the construction of these stories, in the sense of imaginative literature that can powerfully prompt a reader to imagine new possibilities in education (Barone, 2001a).

It was important that the research participants, as primary characters in the stories, verify the accuracy of the stories that I wrote. This accuracy check was similar to the process Barone (2001b) used in his narrative storytelling for what he calls an "ethical gesture more than an epistemological one, an action designed to honor the rights of informants to read and react to our jointly constructed versions of their life stories" (p. 168). After completing drafts of the stories, I contacted my former students and asked them to read the stories and make comments on them. I made all suggested revisions, with the expressed consent that those revisions would be satisfactory for the research participants' confirmation of accuracy. The stories I constructed based on this method were overwhelmingly accurate, according to my participants. Upon the conclusion of the accuracy check in this study, only one student prompted me to adjust a minor detail in her personal description. In all other respects, the participants commented on the veracity of the accounts I brought to life through these constructed representations.

A central goal of educational criticism is to provide a written account of educational phenomena that allows the reader to see and feel what that event must have been like. Eisner (1998) puts it thus: "It should enable readers to get a feel for the place or process and, where

possible and appropriate, for the experience of those who occupy the situation" (p. 89). I argue that it is perfectly appropriate to provide an account of my experiences in the e-learning events I made possible throughout this study. This is particularly true since I centered the entire study on my own teaching practices and their contributions to the e-learning events that I discuss. To get to the heart of the events I describe, I then turned to a second dimension of educational self-criticism: interpretation.

Interpretation

When interpreting the significance of the e-learning events described in the stories I tell, this aspect of analyzing data takes on a measure of deconstruction. Essentially, my aim is to shed light on the e-learning events described in the stories by explaining the characteristics of what has taken place in those stories. In so doing, I also account for the reasons why certain events transpired in the stories. Eisner (1998) explains: "This goal frequently requires putting what has been described in a context in which its antecedent factors can be identified" (p. 95). The context I provide throughout the interpretation of the narratives is in the form of the Map of E-Learning introduced in Chapter Two.

The Map of E-Learning provides a way to discuss the e-learning events and the way the characters of the stories experienced them. I investigated all of the aspects of the characters' experiences in light of the dimensions of e-learning represented by the three axes of the Map of E-Learning. Axis A, information processing functions, describes the level of thought activity a student utilizes in an e-learning event. Axis B, practitioner interaction, conceptualizes the level at which a student requires the interaction of a social other to conduct an e-learning activity. Axis C, electronic pedagogy, demarcates the kind of teaching that occurs in an online learning experience. By looking carefully at the nature of the e-learning events described, in terms of each

of the three dimensions of e-learning, I was able to move through a very careful analysis of the kind of teaching and learning that occurred.

The role that each of the dimensions of e-learning played in the described e-learning events can be pinpointed and identified as belonging to one of four levels demarcated on each of the three axes. These levels provide my interpretation with a point of reference on the Map of E-Learning. For example, teaching strategies that I used in an e-learning event could be examined in terms of a particular pedagogical approach to e-learning. In that way, I grounded the interpretive analyses in a readily identifiable scenario of teaching and learning.

As each of these facets of the e-learning events were explained in light of the three axes of the Map of E-Learning, a visualization of the type of teaching and learning occurring in the stories became necessary. I represented the experiences of each of the characters as points plotted on the Map of E-Learning. The points provide a visual representation of what has transpired in the stories, and enable us to further visualize what e-learning events look like. This alternative visualization complements and expounds upon the one established in the descriptive stories of the e-learning events.

With a relatively clear picture of what has happened in the study and for what reasons these things happened, we may more confidently move into the third dimension of educational criticism: evaluation. As I progressed through the process of analyzing the data, I turned my attention to judging the educational value of the teaching and learning that occurred in the study. How I addressed the realm of evaluation in the diagnosis of the e-learning events I investigated is described in the following section.

Evaluation

Evaluation in educational criticism is a process aimed at appraising the goodness of an educational situation (Eisner, 1991). In this study, I was interested in assessing the effectiveness of my teaching as it related to the e-learning events I described and their interpreted educational outcomes. I looked very carefully at places where my teaching tactics had excelled and where they had faltered as evidenced by my students' experiences in the cases under discussion. In e-learning events where my pedagogical strategies were effective, I made mention of them by discussing the educational outcomes such approaches to teaching made possible. On the contrary, when my teaching practices apparently faltered, I discussed possible ways that those practices might have been improved.

The efforts I have made in evaluation throughout this study are consistent with the trend of much early twenty-first century research in online instruction. Current research is directed toward investigation of the ways that we can improve e-learning in practice. Improvement "is concerned with best practices and improving both interaction and interactivity in online courses" (Palloff & Pratt, 2005, p. 3). I was directly concerned with the improvement of my teaching practice in online education as I assessed each of the practices I used in the e-learning events described in this study.

In my evaluation of the cases presented in this study, I was most interested specifically in discussing the effectiveness of my teaching practices in terms of the community of inquiry (Garrison & Anderson, 2003). In some cases, students disconnected from the community of inquiry. These instances were "red flags" that indicated some problem that I needed to address. In my assessment of those symptoms, I came to understand that oftentimes the students were functioning outside of the realm of the community of inquiry through some action, or inaction, of

their own. However, at other times, my teaching practice was a root cause of my students' sense of exclusion. In each case, I addressed these situations in terms of how I could have bettered the educational situation through some technological innovation, improved instructional design, and/or enhanced teaching tactics.

Thematics

The final way that I analyzed the data was through the development of themes. I attended to this dimension of educational criticism by drawing out major conclusions about the nature of e-learning in the post-secondary art appreciation classroom. I present these thematic conclusions in Chapter Seven. Each one points to a unique attribute of e-learning. I considered each of these attributes in light of specific examples from the cases of e-learning described. These examples helped to verify the accuracy of the analysis. Additionally, I give these thematic conclusions an identity through real examples of their roles in e-learning. In that way, these methods of data analysis could remain consistent throughout the study.

Validity and Credibility in Educational Criticism

For educational criticism to be considered valid and credible, Eisner (1994) discusses three conditions that must be met: 1) Structural corroboration addresses the question of whether the evidence presented by the researcher is appropriate for the argument s/he makes in the research, 2) Referential adequacy provides a basis for the generalizability of the study's findings to a situation that lies outside the context of the study, and 3) Consensual validation speaks to the way that the findings of the research must resonate within the ranks of a broader informed audience by inciting dialogue within the members of that greater community (Siegesmund, 2003). I attend to each of these concerns in order to "point out what is there, but not previously

seen" (Siegesmund, 2003, p. 4). Each of these three concepts is examined in detail in the following sections. I also attend to how each of these important concerns was addressed in this study.

Structural Corroboration

Eisner (1998) defines *structural corroboration* as "a means through which multiple types of data are related to each other to support or contradict the interpretation and evaluation of a state of affairs" (p. 110). It is similar to the process of triangulation, in which one assembles evidence for his or her findings from multiple sources to lend credibility to the argument. An educational critic builds a case as a lawyer might in a court of law. These supporting data can take many forms, including direct observation of the classroom, interviews with students and teachers, and analysis of educational materials used.

I establish structural corroboration in this study by the presentation and thorough written accounts of selected e-learning events and the pedagogical strategies that contributed to their occurrence. My work in the classroom provides the means by which I can discover the fine-grained details of the learning events under scrutiny and present them in a way that they mutually support one another. The mapping of e-learning events on the theoretical framework, as described in Chapter Two, provides a skeleton for assembling the details of those events into a clearer picture of the classroom occurrences.

Referential Adequacy

Referential adequacy, the second condition for credible educational criticism, necessitates a reeducation of perception so that the claims of the critic are tested (Eisner, 1994). Essentially, the goal of referential adequacy is to provide enough descriptive detail so that another teacher could recognize the features described in his or her own classroom. Eisner

(1998) puts it this way: “Criticism is referentially adequate to the extent to which a reader is able to locate in its subject matter the qualities the critic addresses and the meanings he or she ascribes to them” (p. 114). Embedded in referential adequacy is the primary aim of educational criticism itself: to expand the perception and enlarge the understanding of a reader who might have missed what the educational critic brings to light in an educational situation.

It was important that the portrayals of e-learning events in this study were not only convincing, structurally corroborated stories, but were narratives that a reader could use to evaluate his or her own experiences in teaching art appreciation. By expounding on the themes developed from the educational criticism of e-learning events into the larger realm of education that exists beyond the boundaries of this study, some generalizations about teaching and learning could be made. If members of the art education community at large are able to see the implications of the events of this study for their own classrooms, referential adequacy is achieved.

In Chapters Four through Six, specific examples of ways that the events of the online classroom influenced my teaching of art appreciation in the traditional post-secondary classroom are provided. The findings and generalizations of this study can be applied to educational situations removed from this one in space and time, regardless of the changing nature of the technologies of e-learning.

Consensual Validation

The third evidence for credibility in educational criticism is *consensual validation.* Eisner (1998) defines it as “agreement among competent others that the description, interpretation, evaluation, and thematics of an educational situation are right” (p. 112). Such agreement may often be difficult in every respect, because each critic brings particular lenses to his or her

investigation of the educational situation. Instead of conflating consensual validation with inter-rater reliability (commonly sought in experimental research methodologies), Eisner reminds us that differences between critics are not a liability but a source of richness. These differing perspectives are a result of different critics attending to different dimensions of the same educational phenomenon. Furthermore, Eisner (1998) contends that internal coherence and structural corroboration are much more important in a work of educational criticism than the degree to which there is consensus among judges.

In order to achieve consensual validation, the work of educational criticism must be taken into the public realm. Therefore, consensual validation might be thought of as the implicit arrangement an educational critic makes with the research participants that the work will be brought into the public arena for the purpose of creating dialog with the intention of educating that public (Siegesmund, 2003). The establishment of consensual validity is possible through the public presentation of this research in several formats.

Primarily, this dissertation brings the issues under investigation to a small community of people. The research participants participate in consensual validation as they conducted the member checks I described in the previous data analysis section. My dissertation committee provides feedback as it assists me in the accurate and thorough presentation of the findings of this study.

The work will enter a wider sphere of the community, however, as I present the findings of my research at conferences. I presented initial stages of this work at the 2004 annual conference of the Georgia Art Education Association (GAEA) and at the 2005 and 2006 annual conference of the Qualitative Interest Group (QUIG) at the University of Georgia. I also made a presentation of this research at the National Art Education Association (NAEA) Conventions in

Boston in March 2005 and Chicago in March 2006. My attempt to achieve consensual validity will continue as I present and publish the findings of this study in the future. In such forums, the claims of this study are open to the potential intersubjective agreement of a group of knowledgeable individuals, which can provide the objectivity necessary to establish the validity of the work of educational criticism (Eisner, 1994). In that way, this work of educational criticism is never truly finished.

In the next chapter, I bring the methods of this study to bear on two of the e-learning events conducted in my online art appreciation class. Specifically, I present three stories about my teaching during two different synchronous class lectures. Each of these stories is the result of the creatively constructed representations I generated through the methods described in this chapter. The characters are based on database descriptions the participants provided about themselves. Their interaction with one another and me is based on archived data from the study. The student who provided the basis for each of the main characters participated in an informant check (Barone, 2001b) to verify the accuracy of the stories.

CHAPTER FOUR

The Case of the Online Lecture

Introduction

This is a story about my teaching. The story revolves around the process I went through as I conducted a series of six online lectures with my art appreciation students in the summer of 2004. These e-learning events were made possible using Horizon Wimba, a synchronous course delivery software that enables a student to see PowerPoint slides, hear the instructor's voice, and participate in text chats with peers and the instructor via the Internet. During these six Horizon Wimba sessions, I continually reflected on my developing skills as an online lecturer, keeping my pedagogical practices at the forefront of my mind.

This story begins in the second week of the art appreciation class during the summer of 2004. I had met with my online group twice in the virtual classroom of Horizon Wimba: once on Monday, June 14th, and once on Thursday, June 17th. For each of these sessions, I prepared a PowerPoint slide presentation that highlighted the major points of two different chapters in our textbook, and included slides that incorporated digital images of selected artworks. The educational goal of the first lesson was to define art in the context of objects that the students had selected from their everyday lives. I wanted them to bring the objects they selected into class and discuss them for their artistic properties. The educational objective of this lesson was to categorize artworks according to the purposes they might have and functions they might serve.

For the June 17th class, I wanted to have my students discuss the role of iconography in how a viewer understands a work of art. I wanted my students to look at several symbol-rich works of art and connect those symbols with the form and content of the works in order to try to

discover their meanings. Talking with my students about these works of art in the context of an online lecture provided the makings of an educational roller coaster as we experienced the heights and depths of this foray into e-learning.

The story revolves around three of my students, Tricia, Catherine, and Ellie, who had volunteered to venture online with their peers to participate in the online lectures. I say participate, because that is what they were supposed to do. However, the level of their participation fluctuated since my teaching techniques seemed to waver between the dreadful complacency of a novice online instructor and the oblivion of one who did not know how to fully tap into the potential of the online lecture.

As the story of my teaching is integrally linked to the experiences these participants have in the online lecture, their experiences tell as much about the nature of the e-learning event as does my own experience. We might consider our respective positions in the online lecture as two pieces of the same puzzle; we need both to fully see the picture.

Tricia Johnson was a busy college senior who found time to develop her mind and attend to the well being of others in her many collegiate pursuits. Her hectic weekly schedule split her a half-dozen different directions. Somehow, between night and weekend work at Outback Steakhouse and weekday involvement with the UGA Athletic Association, she found the time to manage a couple of bands and pursue her passionate interests in art, sports, travel, and organizing the Georgia Guys and Girls program, which assists the recruitment of students to the University. As a member of the Pi Beta Phi sorority, Tricia was a young woman who liked being around others; she had positioned herself to be with other people at almost every moment in her waking hours. The seemingly distanced and impersonal online lecture really threw her for a loop. She needed human contact through the immediate connection to others.

Catherine Rogers was an intelligent and outspoken college junior who readily admitted that she was constantly in a state of flux. Her mercurial nature reveals itself in her choice of hair color, which was as dark as a raven one day, but maybe blonde, auburn, or even red the next. She was quick to volunteer to be a member of my online class. The online realm amplified her intelligence and outspokenness so that she could bring her previous experience in online learning to fruitful application. The online lecture would become a chance for her to crystallize the nebulous drifting that characterized much of her life; she would prove to be a leader and a guide.

Ellie Smith, who was a rising sophomore at the time of the study, signed up for the online art appreciation group on a whim. She had never taken an online class before, but she figured that she could tackle it in the same way that she had taken on her entire college experience so far: head-on. She was really looking forward to the e-learning experience, too. At worst, she thought, at least she could enhance her computer skills through the activities of the class. Her approach to life was just like that. She loved sports, but readily admitted that she was not particularly good at any of them. Still, she was planning to take a golf class in the second short session later on that summer, in hopes of improving her game. Self-betterment and personal experience in as many different areas as possible motivated her to be the best she could be. The online lecture would prove to be a hindrance, rather than a boost, in her quest for a successful e-learning experience.

Ellie, Catherine, and Tricia's experiences dovetail with my own throughout the stories. I move back and forth between descriptions of their experiences in the study and my interpretations and evaluations of those events. Each narrative begins with one of my video journal reflections recorded immediately following the online lecture session.

Vignette #1: Tricia's Frustration

Video Journal Entry: June 14th, 2004

> *One thing that was interesting as well is that my students were sharing art objects in the class today, both online through JPEGs and with physical artifacts in the face-to-face class. And, I wish I had had something in place to be able to allow the online students to see what the face-to-face students were sharing as their art objects. I think that would have been really helpful. And, several of the online students asked to see those objects.*

The Face-to-face Classroom

While a small group of my art appreciation students is participating in today's class remotely via the Internet, the majority of my students sit in front of me in the lecture hall. They cascade down the thirteen rows of this giant auditorium that serves as our classroom for this short, month-long summer class. There is a large platform at the front of the 130-seat stadium-style seating area, upon which sits a waist-high, built-in podium that is shoved off to the far left side. I have spread my teaching materials across every surface of the light blue Formica lectern: course text, class rolls, syllabi, handouts, lecture notes, and other assorted instructional paraphernalia. I stand squarely behind my laptop computer, which occupies a place of prominence among the other instructional tools scattered about the surface of the stand.

While I would certainly feel more at ease pacing about the stage during my instruction, my laptop has me anchored here for two reasons. First, it connects me to the fifteen additional students who are online and logged-on to the Horizon Wimba session that is the hub where our interaction takes place throughout the class period. Second, the short wires of my headset microphone tether me to my machine. On occasion during this first Horizon Wimba session, I begin to drift away from my post behind the laptop. The microphone wires suddenly yank me back into my place like a hooked fish. Still, I try to engage the tepid lecture hall students in the discussion at hand by gesticulating wildly and increasing the volume of my voice.

The main event of today's class is a *show and tell*. I charged the students to bring art objects to share with their classmates. The lecture hall students would do so by bringing the physical objects; the online group would do so by submitting digital images of the objects. It would be my task to narrate the events of the lecture hall for my online group and to guide a discussion regarding two questions: a) Why do you consider this object to be art? b) What does this object reveal about some of the essential characteristics of art?

As the class session started, it became apparent that I had left some of my online students in the dark, literally. On the screens of their computers, they saw nothing but a black area in the Horizon Wimba window, where they attempted to envision the Velvet Elvis that Carter brought in to share with his peers in the lecture hall. Worse, my tidy, emaciated summaries of Carter's answers to the two essential questions for the discussion were a dreadful reduction of the richness of our conversation. My thoughts turn immediately to Tricia Johnson, one of my students who was online, and off the beaten path.

Tricia's Inability to Get on Track

Tricia's learning environment is markedly different than most of her peers in my art appreciation class. I can picture her sitting in front of her laptop computer on a sunny summer Monday afternoon. After logging into the Horizon Wimba site, Tricia begins hearing mumbles and what seemed like noisy chatter coming from her computer. On the screen of her laptop, she sees a rather large image of one of the PowerPoint slides and the text messages submitted during a real-time chat that her online classmates were having with one another and me. She realizes that she can hear my voice coming through the tiny little speaker in her laptop, so she turns up the volume a little bit. It is clear from what she hears that I am trying to fluctuate the volume and tone of my voice. She thinks that I must be doing this in order to keep the discussion I am

leading lively and interesting. However, she is not receiving my vocal inflections clearly. Instead, she hears a muffled distortion whenever I raise my voice, which is more than a little annoying.

Not only is the "low-def" transmission of my voice causing her some auditory discomfort, Tricia is becoming increasingly irritated with the way she and her online peers are being alienated by the limitations of the technology. She appreciates my efforts at describing the art objects that the students are sharing, and she finds my comments to be informative and enlightening. However, her experience is somewhat lacking. *If only I could see what these people are talking about,* she thinks.

The other members of my online class seem to be thinking the same thing. After I invite Jenny from the lecture hall class to speak about her art object, Travis types out a message in the Horizon Wimba text chat.

travis_phillips are we gona be able to see them?

As Jenny speaks to her peers in the lecture hall, her words are only faintly audible through my headset microphone. It would be impossible for Tricia, Travis, and the others in the online group to make sense of anything Jenny is saying. In an attempt to show a little sympathy for my online students, I write:

robbie_quinn unfortunately, no! I wish you could.

Even though my response seemed dismissive, Travis's comment has got me thinking. My mind races with thoughts and ideas about the direction I needed to take the online students. Again, I could see Tricia in my mind's eye, disconnected as she sits alone in her apartment. I finally come up with what I think is a good idea.

As another student in the lecture hall begins to share her art object, I address my online group with some rather nebulous spoken directions. "Okay, everybody out there. Bear with us

here. We are just working through this. Maybe what y'all could do is go to the WebCT site—just leave this window up and ready for you to come back to. Then, look at your classmates' art objects posted in the Bulletin Board area. Maybe y'all can discuss those just briefly. At least look at them. I saw last night that there were probably eight or so of them up there."

To Tricia, this seems like a reasonable way to become a part of the discussion. The others seem to think so, too, but request more specific directions from me. My verbal reply is still somewhat vague, "And y'all can go and chat in the WebCT chat rooms—that could be kind of interesting."

During the next half-hour, Tricia bumps around the WebCT chat rooms a little bit. Her attempts at getting somewhere feel like a long walk in a cornfield maze, *at night.* All the while, the sound of my voice and the faint echoes of her lecture hall counterparts grow ever more tiresome and disorienting. It was time, she felt, for her to say something about this less-than-desirable learning situation in which she has found herself. She has been listening to the discussion I have been having primarily with my lecture hall students for almost forty-five minutes when she finally types a message.

> tricia_johnson Will we eventually be able to view what's actually going on in class instead of only listening in and seeing a black screen?

It is clear that she is confused and perhaps slightly perturbed. Her attitude is understandable. She sits in her apartment alone with her laptop as she listens to a series of often-garbled statements and other vocal offerings that are much too faint to hear with no visual cues to aid her in interpreting what it is that she thought she was hearing. There is a sense of disappointment that accompanies Tricia's question, and a longing for a connection to her classmates that is, for her—at least at this moment—not possible through the virtual classroom.

Interpreting Tricia's Frustration

In the snapshot I provided in the previous section, there was a sense that Tricia had been provoked through the course of the online lecture. Throughout the following section, I offer an interpretation of the e-learning event I have described through Tricia's story in order to help the reader see the significance of the event more clearly. I illuminate the significant aspects of this e-learning event by plotting it on the Map of E-Learning (see Figure 2.12) introduced in Chapter Two. The Map of E-Learning provides us with three dimensions of all e-learning events through which we may more accurately understand just what has occurred in Tricia's interaction with the online lecture. As previously discussed, the three axes of the Map of E-Learning demarcate dimensions of e-learning. The three dimensions of e-learning are: Axis A, information processing functions; Axis B, practitioner interaction; and Axis C, electronic pedagogy.

Tricia's Position on Axis A, Information Processing Functions: Outlier

The first dimension of e-learning, as described by Axis A of the Map of E-Learning, is *information processing functions*. There appears to be no evidence of the way Tricia was processing the information presented in the online lecture. She sat alone at her laptop, unprompted to do anything besides listen to the conversation I was having with the lecture hall students. Her thoughts drifted in and out of the bits and pieces of conversation she heard me convey through the Horizon Wimba audio feed. Perhaps she was daydreaming throughout most of the online lecture; it is not too difficult to imagine that she was. Her mental engagement in processing the information would not even begin to register in the realm of cognition. It would have been necessary for Tricia to exhibit some signs that she was processing the information to which she was supposed to be listening. Simple text chat comments submitted to the Horizon Wimba chat would have been sufficient. Instead, she remained silent.

Plotting Tricia's thinking in terms of the Map of E-Learning, I consider her level of information processing to be outside of the reach of Axis A, which delineates the information processing functions that are called upon by e-learning events that occur within the community of inquiry. Her thinking activity makes her an *outlier* beyond the far end of the automatic realm of Axis A, as seen in Figure 4.1. She is an outlier because she provided no evidence of the way that she was processing information.

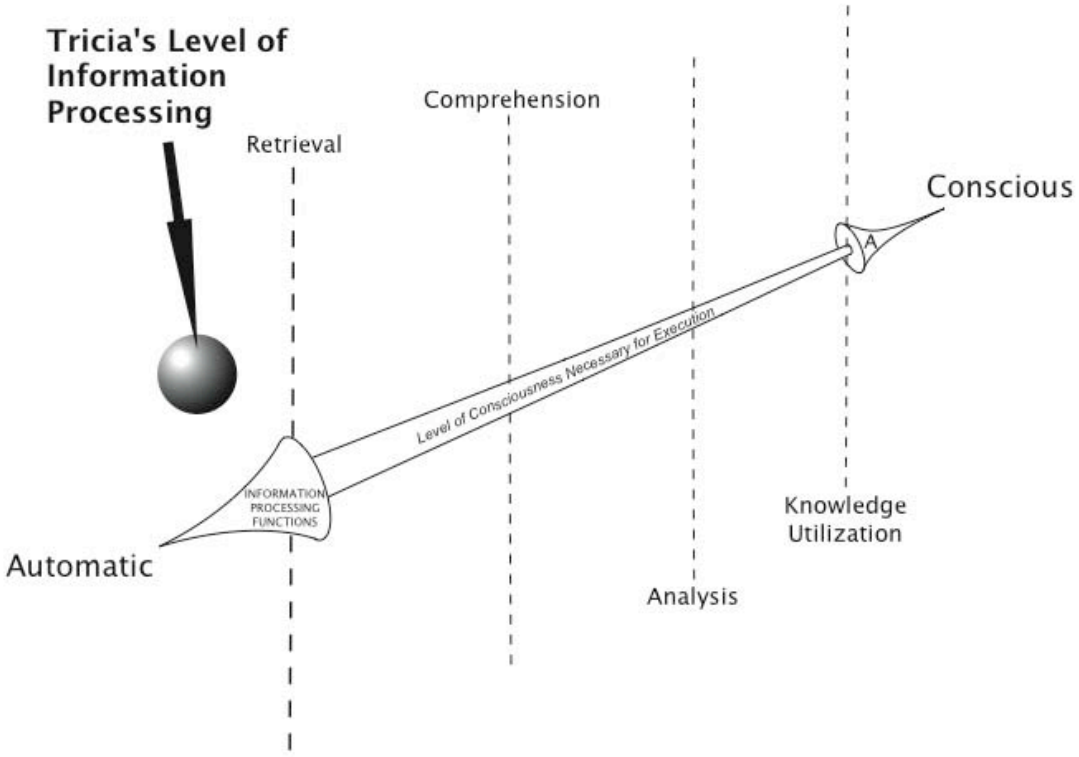

Fig. 4.1. Tricia's level of information processing during the online lecture.

Tricia's Position on Axis B, Practitioner Interaction: Outlier

Considering the second dimension of e-learning, which is practitioner interaction, it appears that Tricia was not actively establishing any discernable level of practitioner interaction. She remained idle as I conducted the online lecture. She did not initiate discussion in the Horizon

Wimba chat with her peers, nor did I direct her to do so. Only the sound of my spoken commentary and the faint whispers of the students in the lecture hall connected her to the class. Tricia never made an overt attempt at establishing any kind of social presence through the text chat.

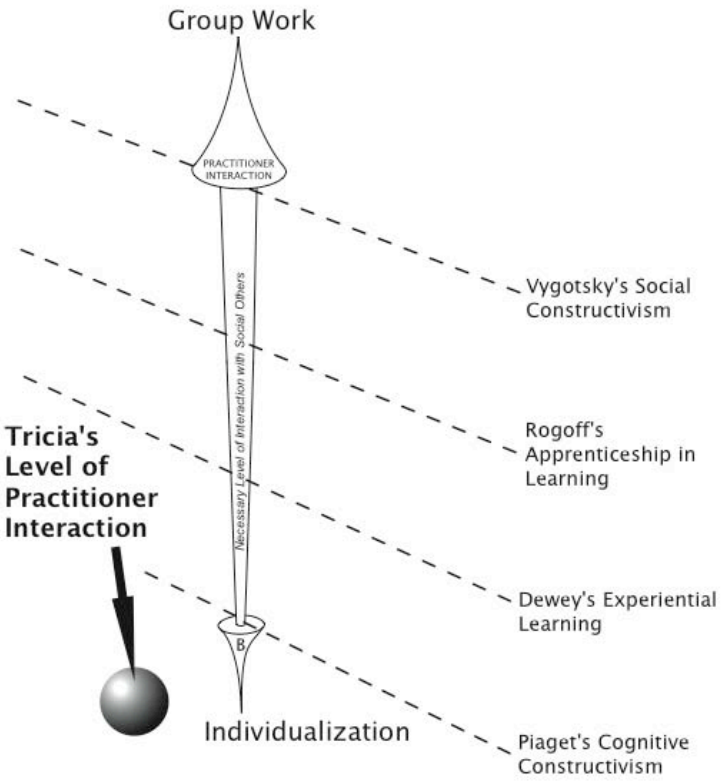

Fig. 4.2. Tricia's position on Axis B during the online lecture.

To plot the level of practitioner interaction Tricia exhibited, it appears that her activity relegates her to a point beyond the extreme end of the individualization realm of Axis B. In fact, she has isolated herself so significantly, that her social activity in the online lecture situates her outside of the community of inquiry.

Again, Tricia is an *outlier* in terms of practitioner interaction, just as she was concerning her level of information processing. Just because she logged onto the Horizon Wimba site does

not guarantee that she was in a meaningful relationship with her peers or me. In the closing moments of her story, we saw that she typed out a question for me regarding her perceived interest in being included in the events of the online lecture. Her comment is not one that indicates her connection to the activity at hand, but is more of an indication of her frustration with the direction the class was heading. Tricia's level of practitioner interaction remains an outlier because none of her activity connected to the e-learning event as it was being conducted.

Tricia's Position on Axis C, Electronic Pedagogy: Information Transmission

Considering the third dimension of e-learning, which is electronic pedagogy, I find that the techniques of teaching I utilized in the online lecture were highly teacher-centered. Tricia's involvement, both mentally and socially, in the online lecture were dependent upon my activity. I directed the events of the lecture hall as I led the discussion there with little to no regard for my online group. Essentially, I attempted to translate what was happening in the lecture hall for my online students by reiterating comments shared by my lecture hall students and narrating the events of the lecture hall for the online group.

To plot this teaching technique on Axis C of the Map of E-Learning, my pedagogical activity is limited to providing the online students with information about the discussion occurring in the lecture hall. As the sole liaison between the online group and their lecture hall counterparts, I was the only one in possession of that information. I attempted to transmit that information to Tricia and her peers by describing the art objects my lecture hall students and I were discussing. Therefore, it is my conclusion that *teaching as information transmission* is the pedagogical strategy I used in my online lecture. As seen in Figure 4.3, this teaching strategy is at the extreme end of the instructivist terminus of Axis C.

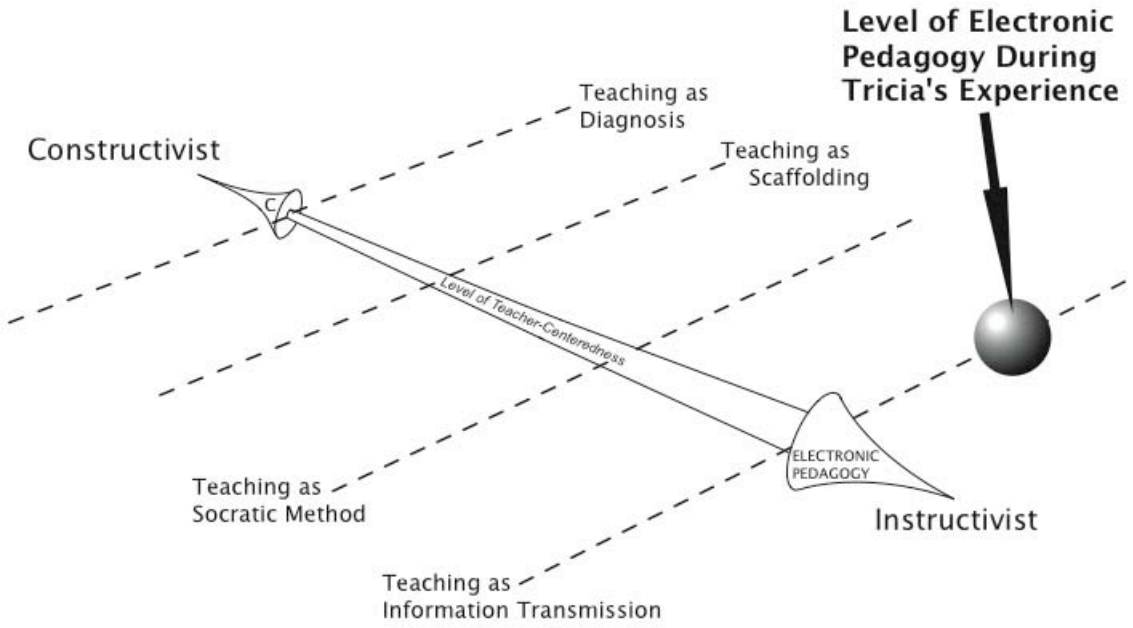

Fig. 4.3. The level of electronic pedagogy I used in the online lecture.

To achieve a clear indication of Tricia's experience in the online lecture, I can view the combination of all three dimensions of e-learning plotted on the Map of E-Learning. Her position on the map, as seen in Figure 4.4, would be just outside of an extreme corner of the community of inquiry. In Figure 4.4, I have only shown the matrix superimposed on the lower foremost quadrant of the Map of E-Learning. Tricia's experience only aligns with one dimension of the Map of E-Learning. The point that represents her position while she listened to the online lecture links to the pedagogical strategy I used in teaching as a form of information transmission. It was as if I expected her to sit idle while I had a discussion with her lecture hall counterparts. I would only speak occasionally to inform her and her online peers of the important things occurring in the class. Her level of practitioner interaction, as seen here, is beyond the realm of Axis B, as is her level of information processing beyond the realm of Axis A.

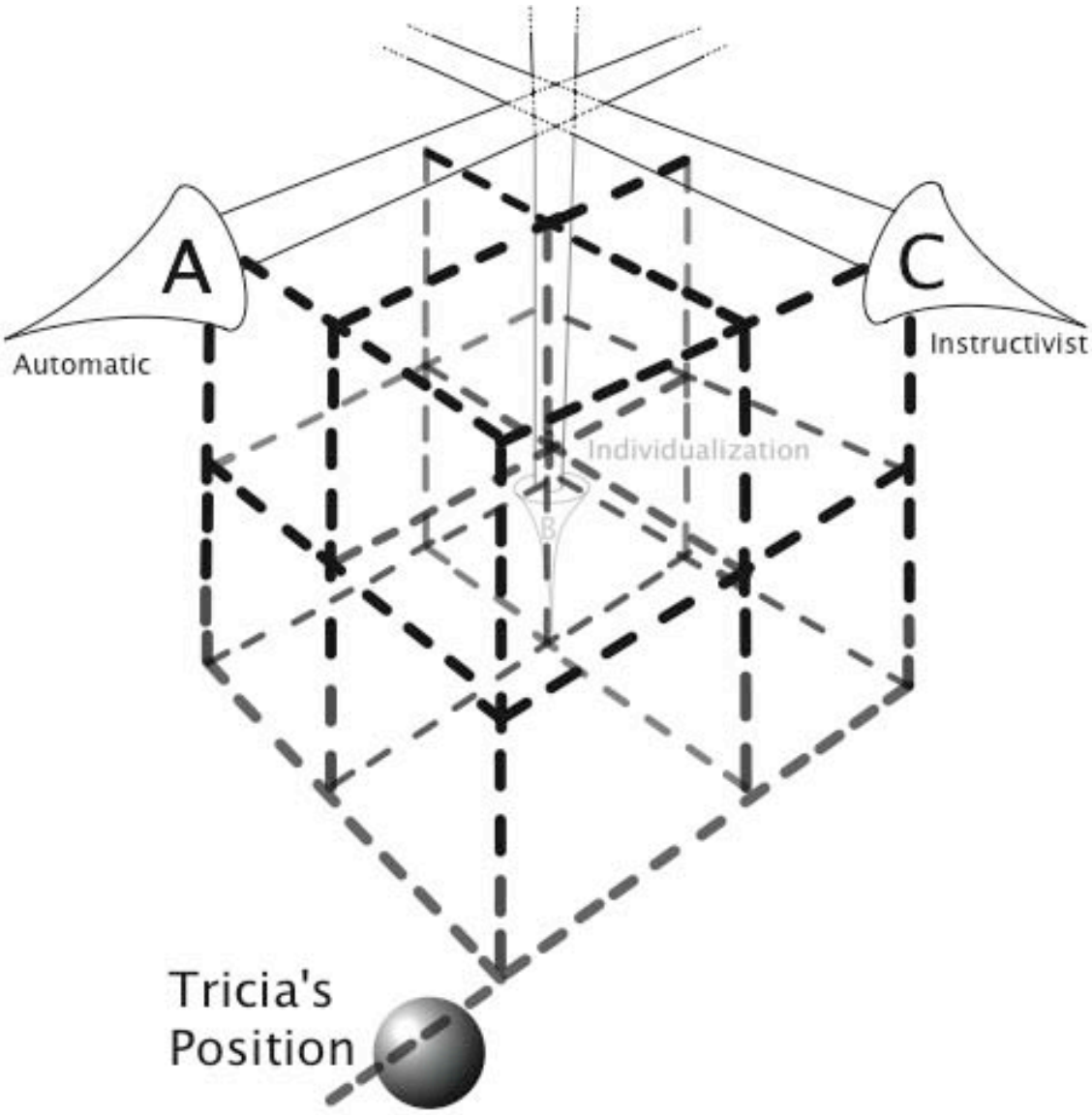

Fig. 4.4. Representation of Tricia's position on the Map of E-Learning.

An Appraisal of Tricia's Experience in the Online Lecture

The question of evaluation is one that revolves around the goodness of the educational situation under investigation. In this case, I must look carefully at what has happened throughout the course of the online lecture to determine its value. There is an element of introspection at play in the work of evaluation in this case because the e-learning event is a product of my pedagogy. I am interested in discovering whether my approach to the online lecture was

beneficial or detrimental to Tricia and her online peers. Furthermore, I desire to assess this act of teaching in order to improve upon it in my future practice.

We see in Tricia's frustration an immediate sign of trouble. Her isolation was antithetical to her typically sociable and outgoing approach to life. Her inability to interact with the lecture hall students and their work seemed to establish an impasse for her continued involvement in the online lecture. While Tricia perceived, for good reason, that she had been isolated from the rest of the class, her own lack of initiation proved to be hindrance to her learning experience, as well. It seems that she could not figure out how to make a new kind of connection with her online peers in the attempt to hold a discussion in the virtual classroom. Or, perhaps, she did not want to try. Her efforts, if sincere, to view and discuss the art object JPEGs her online classmates had shared with one another appear to have come to no fruition. She felt herself longing for a window into the lecture hall, in order to feel its comfortable academic embrace. Moreover, like the mythological Echo pining away for the unrequited love of Narcissus, Tricia was unable to connect with the object of her intellectual affection.

Connection and the Social Sphere of E-learning

I knew the students in my online group needed to socially connect with others. According to Bandura's (1963) social learning theory, learning occurs when behaviors, attitudes, and the emotional reactions of others are observed as they are modeled by those around us. The socialization and connection of students with their teachers and peers is the locus of much of the process of schooling.

With social learning theory serving as a guiding principle in online course construction, how could I have overlooked the necessity of providing the means for such interaction? While brainstorming my course design, I was trying desperately to think of a way that I could provide a

connection between the learning environment of the face-to-face students in the lecture hall and their online peers. I could have used a video camera, or a web-cam, to film the events in the lecture hall. That way, the online students could view the things that were happening between the lecture hall students and me.

However, I knew that I could prompt my online students to engage in social interaction with each other, although it would be an interaction of a much different nature than it would be in the face-to-face classroom. I hoped it might substitute for the lack of interaction they had with their classmates in the lecture hall. That hope was the main reason that I decided to conduct six synchronous class sessions throughout the semester in the first place. I wanted to provide a same-time, same-place avenue for the online students to bridge the distance between them and the face-to-face students. Interactive computer technologies are supposed to be *interactive*!

Still, I wrestled with the isolating and alienating effects of the way I was conducting the first Horizon Wimba session. This was especially true when, in my mind's eye, I pictured my online students sitting alone in some space, somewhere, wanting the physical presence of other students.

Implications for Teaching

It was necessary for me to facilitate Tricia's entrance into the realm of the online lecture. I knew that Tricia and her online peers would experience a classroom environment unlike anything they had ever encountered. Yet, I did not take the necessary measures to facilitate their entrance into the strange new world of e-learning. I thought that my narration of the lecture hall events would provide a sufficient connection between the online group and their lecture hall counterparts. Then, by suggesting that the students attempt an online discussion while the online lecture proceeded, I only made matters worse.

Instead, I could have utilized some additional forms of technology to provide the online students with access to the lecture hall activities. I should have heeded the advice of the September 2005 edition of the *Horizon Wimba Newsletter*.

> If you're using Live Classroom and have some students logged in remotely and some actually in the face-to-face classroom, put a video camera on the in-class students so the remote participants can see and hear their fellow classmates. This is a great way to build community and to make your remote students feel like they're on campus. ("Horizon Wimba Newsletter", 2005, Tips and Tricks section, ¶ 2)

A video camera would have made a large difference in this initial Horizon Wimba session. The online students would have been able to see and hear what their lecture hall classmates were showing-and-telling. This straightforward technique could have facilitated the online students' transition into the virtual classroom. After the online students had become acclimated to e-learning, the later synchronous class sessions might not have needed the use of the "crutch" provided by the video camera. Alternatively, the video camera might have been a necessary component of all of the online lectures, particularly for students like Tricia.

Vignette #2: Catherine's Facilitation

Video Journal Entry: June 14th, 2004

> *I like the way that the online class is beginning to work as a community. There are some students that are helping each other out; you can see that in little snippets of conversation. Today, during the synchronous discussion, several students' questions were answered by other students in the group, allowing the sense of community to blossom. It was really nice! And I didn't feel like I had to be the point person for every question that was asked. The students felt comfortable enough with each other, even in this very first synchronous session, to ask questions of their peers and feel like the questions were being answered adequately and appropriately.*

A Veteran Online Learner Leads the Way

Of those sixteen students who volunteered to take my art appreciation course online, I imagine that Catherine Rogers was the first one in line. I remember how her face would light up at the very mention of the virtual classroom as I described the way the course would work for a small group of adventurous classmates. From that very first, and only, face-to-face meeting I had with my online group, I could tell by her insightful comments that Catherine was going to be an asset for each and every one of us as we tackled the semester ahead. She seemed to be one step ahead of us all in the path we trod through the unknown terrain of e-learning.

Catherine's expertise in online learning was derived from a class she had taken through the Virtual High School, which is an initiative developed by the Concord Consortium of Concord, Massachusetts (see http://www.govhs.org). This unique online learning program allows students from all over the country to attend online classes (e.g., advanced placement, honors, and college-preparatory classes) offered by instructors from any of the member schools (Palloff & Pratt, 2001). She had described her experience in the Virtual High School as a positive one and encouraged her peers to give their best effort toward the successful completion of the course, no matter how many difficulties might plague them as they encountered the cognitive, psychological, and emotional stresses of online work.

The way that Catherine encouraged, prompted, and even directed her classmates in that first meeting continued in our first Horizon Wimba session. Through her enthusiastic participation in the synchronous text chat, she established and maintained her position as leader and guide. She offered advice to those students who were in need of help or direction in small ways. As I began the Horizon Wimba session, it was clear that Catherine was going to be a

guiding force. However, I had no idea that she would shape and mold the entire e-learning event that day.

Catherine as Online Learner

Catherine sits alone in her bedroom of the Westside-Athens/Bogart house in which she has lived since she was sixteen. As she sits down at her computer desk, she enthusiastically opens her broadband Internet connection, starts Internet Explorer, and navigates to the Horizon Wimba homepage. Her fingers quickly peck out her user name and password to provide her entrance to the Horizon Wimba *lobby*, while her left hand deftly manipulates the mouse to click on the hyperlinked phrase that reads "Art Appreciation (Quinn)" to take her in to the *room*.

She immediately sees the Horizon Wimba window with my first PowerPoint slide displayed, but she is having trouble with the audio. Her brow furrows as she watches the text messages scroll by at the bottom of the Horizon Wimba window. Her classmates, too, are struggling through technical difficulties as they attempt to see the PowerPoint slides and hear my voice. Thankfully, Steve, from Computer Support Services at the University, is online providing help by fielding questions in the text chat and assisting students who were having trouble getting things up and running. He and Catherine exchange a few messages as she attempts to work through her technical problem.

All the while, I am speaking into the headset microphone, and typing text messages to my online students while my lecture hall students are talking amongst themselves about the art objects they brought to class. After almost eleven minutes, Catherine makes a breakthrough. She wrote of her success.

```
catherine_rogers      got sound!
```

She pushes her fingers through her hair as she leans back in her desk chair. *Whew! Finally!* she thought to herself. The victory was short-lived. Three minutes later, she wrote:

```
catherine_rogers did anyone just lose some sound?
steve_harris     it's there just was really low.
catherine_rogers It was blasting a second ago and now it's silent
```

She puzzles at this unfortunate turn of events, and tries to think about what she might have done wrong. Eight seconds fly by, then she remembers Steve's advice. He had directed the students to go back to the lobby and come back in. She remembers that he had led her through the procedure necessary to get the audio up-and-running the first time. Catherine follows his advice for a second time, immediately clicking on the hyperlinked lobby, and then clicking on the hyperlinked "Art Appreciation (Quinn)". Instantly, she hears my voice blaring through her computer's speakers. She quickly turns down the volume.

```
catherine_rogers okay got it
```

It took her sixteen minutes to get the technical issues resolved, which robbed her of sixteen minutes of time during which she could have been facilitating the learning experience for her peers. After all, she had taken online classes previously. It was her turn to provide guidance and direction for those who had not participated in e-learning. Subsequently, it only takes two minutes for her to embrace the first opportunity to provide help. Eighteen minutes into the session, I direct the online students to discuss the art objects they had submitted as JPEGs. Immediately, due to my lack of specific details about this bit of direction, Amanda asks a question.

```
amanda_pickins       do we need to go into the chat rooms
```

While it is impossible to know for sure, I can only assume that she is asking me to answer that particular question. At the time, however, I am busy addressing a student in the lecture hall. Catherine is quick to pick up the slack.

```
catherine_rogers      nah I think he wants us to chat here
```

This is the first instance where she draws on her previous experience in e-learning and takes a position of authority in the virtual classroom. Twenty-eight minutes into the Horizon Wimba session, the online students have finally gotten started with their online chat. While leaving their connection with the Horizon Wimba session intact, one by one they open a new window in their Internet browsers and log on to the course WebCT site. Catherine leads the way as she types her user name and her password into the appropriate fields, and navigates to the chat rooms (see Fig. 4.5 for navigation).

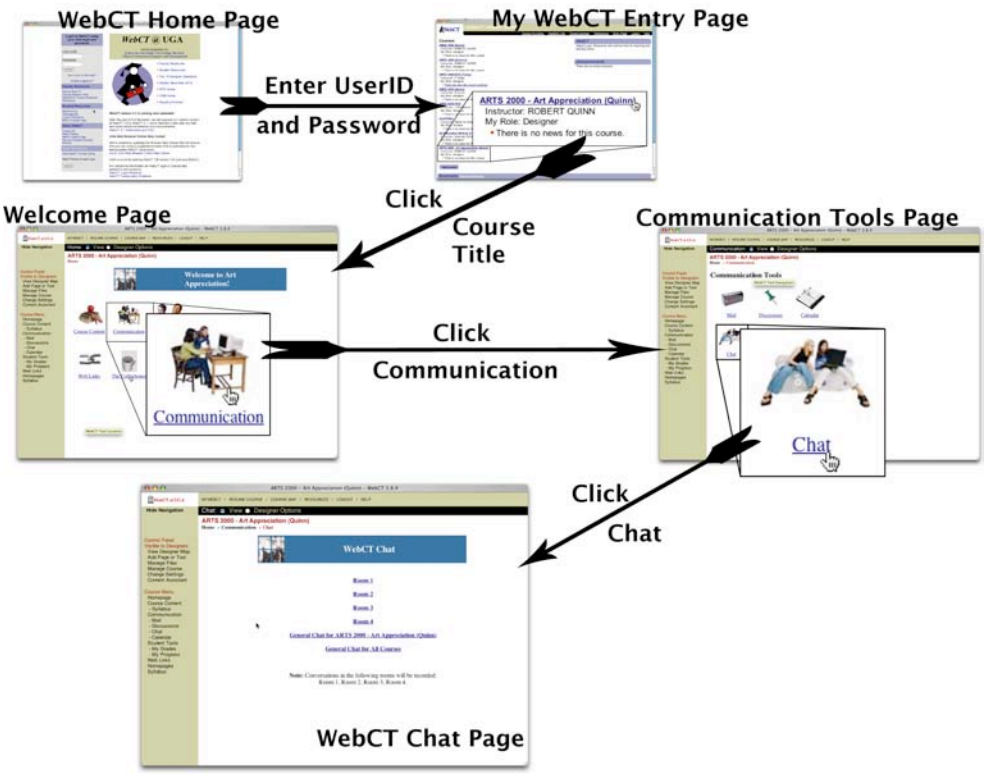

Fig. 4.5. Diagram of the navigation Catherine took to WebCT chat rooms.

She sees four numbered chat rooms, in addition to one that is a general chat room for my art appreciation course, and one that serves as a general chat room for all courses. Catherine reads the note at the bottom of the webpage that WebCT chat records all conversations in rooms one through four. She remembers that I had not been specific in my instructions about which chat room to use, so she pauses for a moment.

She quickly points her mouse to the Horizon Wimba window that she had left open in the background, and scrolls back through the transcription of the chat that was occurring there. She sees that Travis and Chul have decided upon the general chat room. This bit of conversation

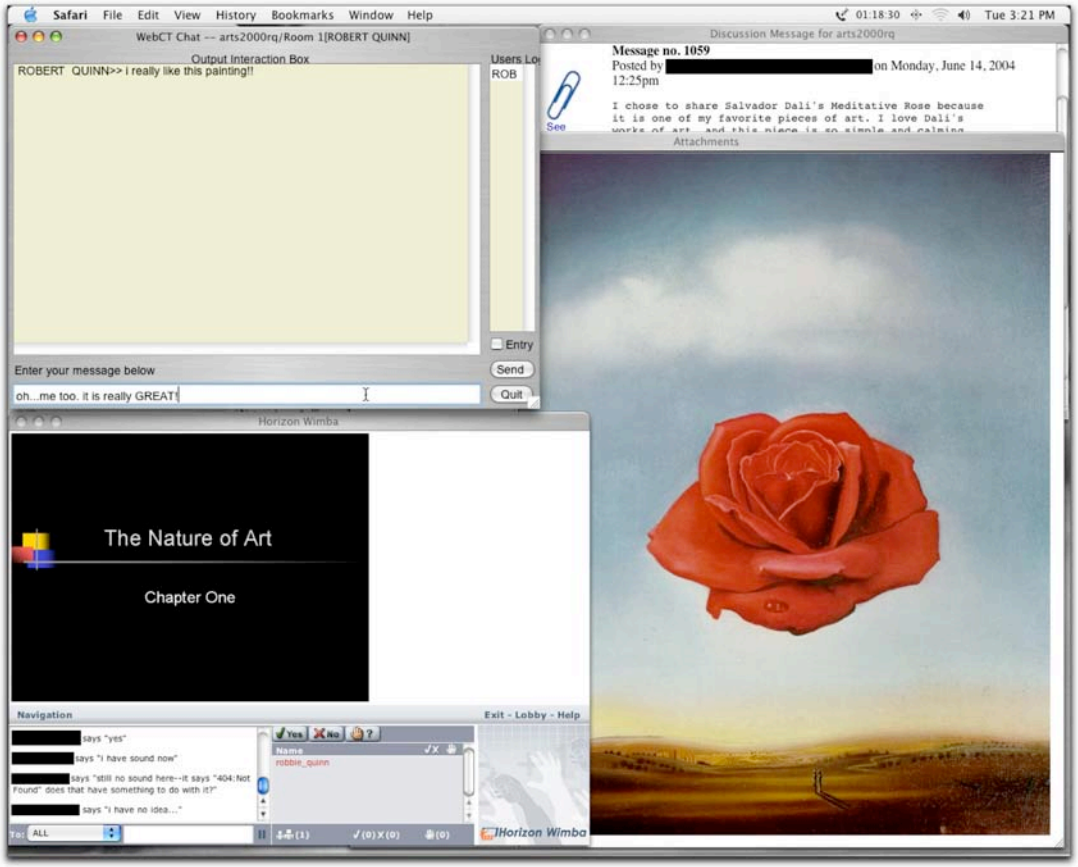

Fig. 4.6. Screenshot of what Catherine's computer screen might have looked like.

from the Horizon Wimba text chat prompts Catherine to head back over to the WebCT site that remained open in another window, and join the others in the general chat room. While there, she chats sporadically with the others for about eight minutes. All the while, she hears my voice from the Horizon Wimba session, and occasionally chimes in about some topic on the Horizon Wimba chat.

She has also been continually viewing her peers' JPEGs as I had directed the online group to do previously. She enjoys having three or four different Internet browser windows open the entire time that she is working during the class (see Fig. 4.6 for screenshot). It helps to keep

Fig. 4.7. Salvador Dali. *The Rose.* 1958. Oil on canvas.

her busy, so that the monotony of listening to my voice does not overwhelm her. It seems to her that it is high time that I discuss one of these art object images.

She opens the image that Jacqueline Navidad posted; it is Salvador Dali's *The Rose* painting (see Fig. 4.7). Her thoughts drift to the surrealistic landscape, where two figures bask in the warm sunlight beneath the large, floating flower. How she longs to be there! The broad expanse of rolling hills, with their golden halos; the ethereal blue sky, enveloping the entire scene. My voice shatters her meditation. "Okay, maybe a couple more…anybody?" she hears me plead.

```
catherine_rogers  show them jacqueline's
catherine_rogers  it's very pretty
```

Her request goes unnoticed, at least by me, as I continue soliciting volunteers from the lecture hall class. Catherine is initially put off by my failure to heed her suggestion, but her annoyance is suddenly forgotten when she reads Theresa's last message.

```
theresa_dunn     =) its hard to look at the art and chat in that room
because it closes you out of the room if you go to look at someones art
```

It seems that Theresa had not quite gotten the hang of utilizing multiple windows for the class (see Fig. 4.8 for navigation sequence).

It is hard for me to understand why Theresa is having the problem she is having, because I am attending to the Horizon Wimba presentation only. I am not trying to bump around the WebCT site in hopes of finally opening the right window in the right sequence as my online students are. Surely, Theresa was not the only victim of the monumental task that was set before the online group. After all, I had not given the students any instruction in the multitasking

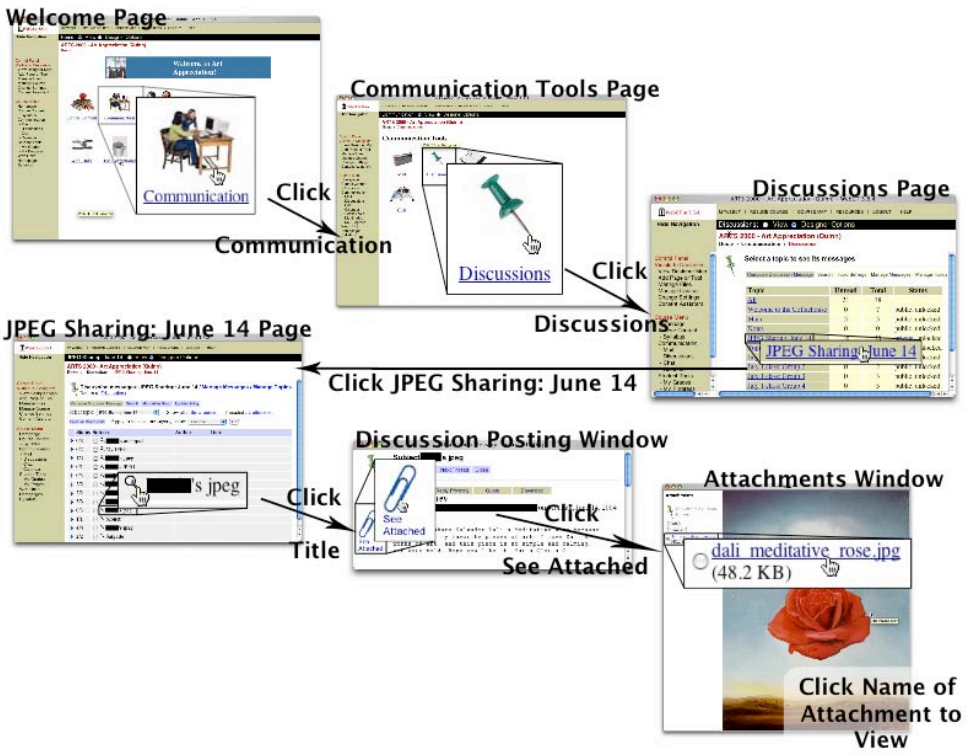

Fig. 4.8. Map of sequence necessary for students to view each other's artworks.

necessary for this class. In the midst of trying to run the three-ring-circus that was this class, all I can muster in response to her is a conciliatory remark.

```
robbie_quinn      ah ha, i see theresa!
```

I am in no position to provide any support to her as she struggles to complete this online task. Thankfully, however, Catherine is.

```
catherine_rogers  open an new window theresa
```

With this simple statement, Catherine again plays an important role in the online activities of one of my students.

```
theresa_dunn      ohh thank you!
```

Explaining the Phases of Catherine's Facilitation

The remarkable aspect of Catherine's story is that she had taken it upon herself to act as a facilitator in the e-learning event. Catherine's openness and willingness to provide guidance and help to her peers was striking. Catherine utilized her advanced knowledge of e-learning to collaborate with me in directing the course of the online lecture. This role was one that she assumed on her own initiative. Sometimes, her knowledge of the way the technologies used in the e-learning event pre-dated her peers' knowledge by only a few minutes. Still, Catherine was willing to share what she had experienced and learned so that others might have success.

The Map of E-Learning helps to visualize the way that Catherine was experiencing the online lecture. Catherine was constantly shifting tasks and positioning herself in different ways throughout the online lecture. For that reason, it is necessary for me to look at the distinct phases of her experience, as time elapsed. Based on her story, I have divided Catherine's learning experience into two phases: a) working through technology issues, and b) providing guidance for her peers.

Phase One: Working Through Technology Issues

The first phase of Catherine's experience is what I call *working through technology issues.* In the first few minutes of her experience, Catherine was attempting to solve a particular problem that she was having with the Horizon Wimba audio. She could not figure out how to make it work, and she needed to rectify the situation. After receiving individualized assistance from Steve, in which he led her systematically through the procedure, she successfully accomplished her goal. However, her audio terminated for some reason three minutes later. Then, Catherine navigated through the problem using a specific sequence of information. It is for this reason that I characterize Catherine's initial information processing function as the problem-

solving process, which is located at the knowledge utilization level near the end of the *conscious* realm of Axis A (see Fig. 4.9).

To be more specific, Catherine has taken hold of a newfound knowledge of a set of details. Because of the bit of instruction Steve gave her previously, she was able to use that set of details to work through a problem that had subsequently arisen. Part of the knowledge utilization process of problem solving is laying claim to one's knowledge of details; another part is applying that knowledge in a specific situation. Because of the way that Catherine is working through a problem on her own, we can look at her level of practitioner interaction on Axis B as

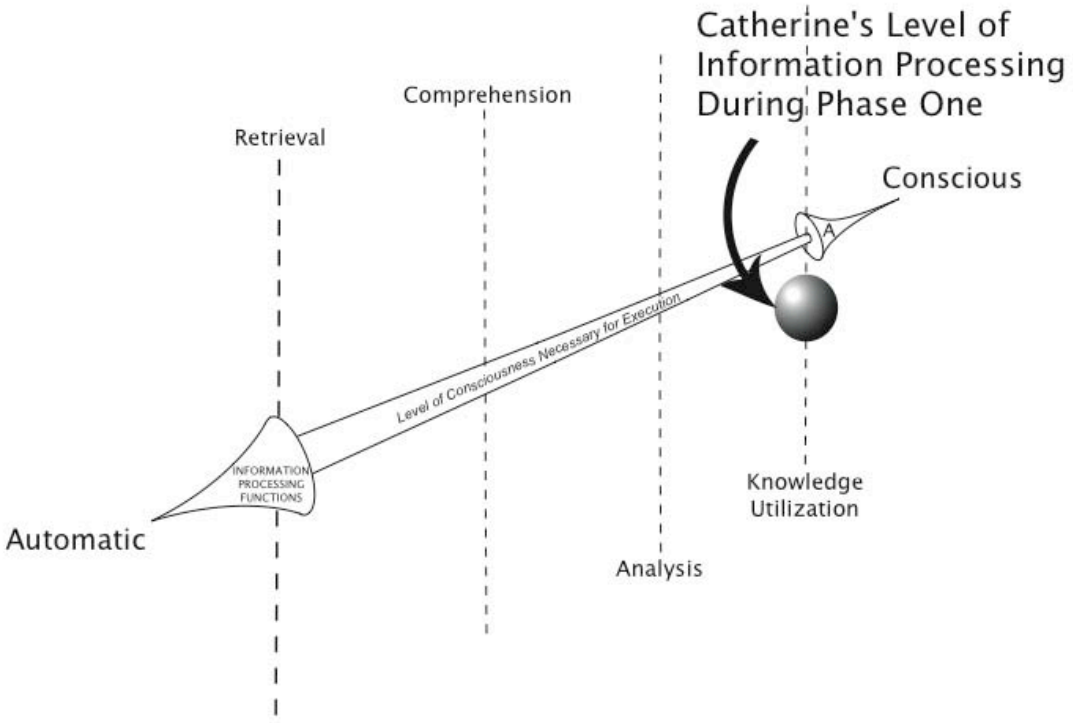

Fig. 4.9. The level of information processing Catherine exhibits during phase one.

residing near the *individualization* end of the axis. Catherine demonstrates her intelligence in this performance task by inductive problem solving.

I suggest that the point best representing Catherine's level of practitioner interaction for this first phase would reside squarely in *Piaget's cognitive constructivism* (see Fig. 4.10). This is true, because for Piaget, "intelligence arises neither from the 'inside' nor from the 'outside', alone, but from external actions, not only on physical objects but, more importantly, on or with other human agents" (Richardson, 1998, p. 95-6).

Moving along to Axis C of the Map of E-Learning, it is clear that in this first phase Catherine is beyond the realm of electronic pedagogy described in Axis C. She has experienced this first phase entirely on her own, without any teaching involvement of my part. She has simply

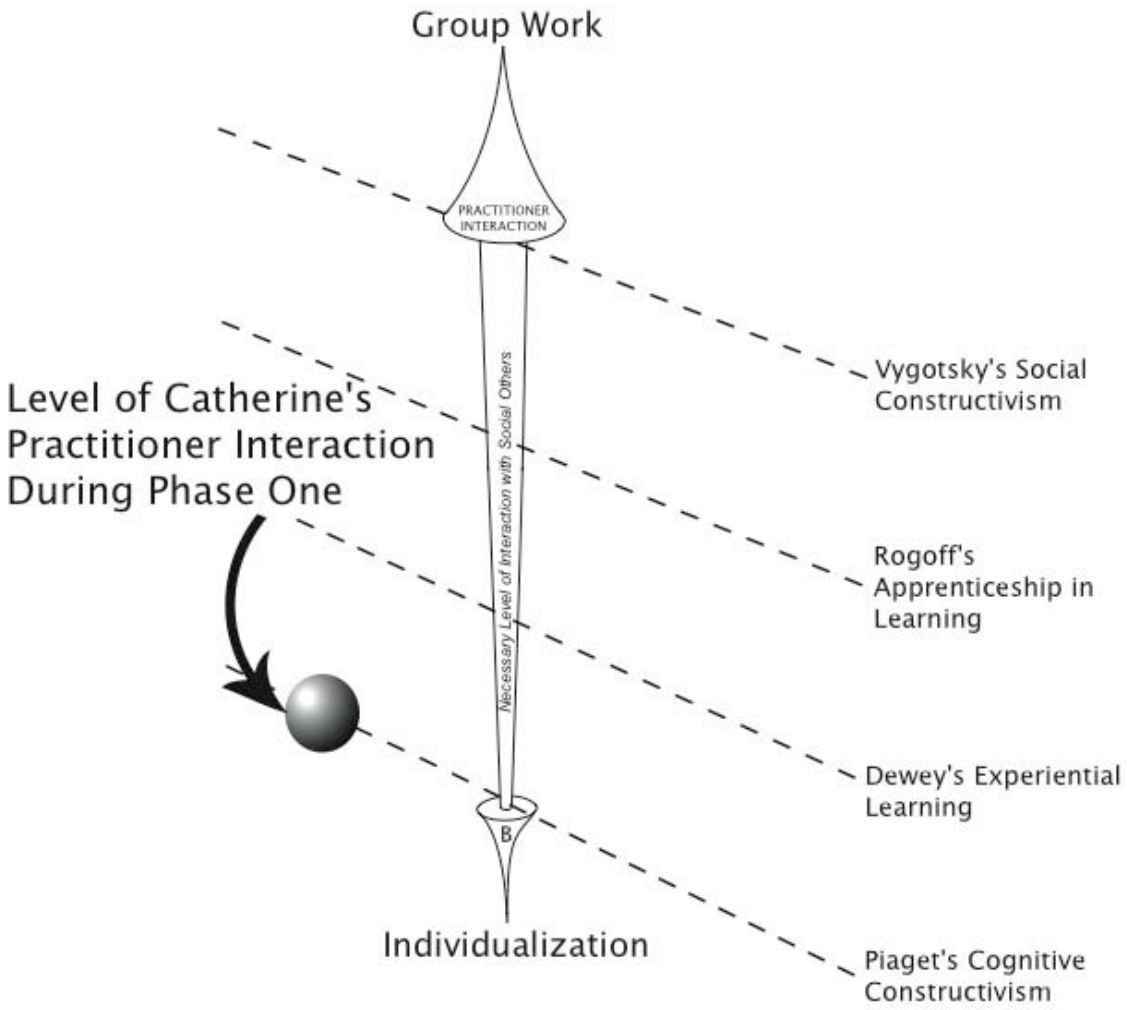

Fig. 4.10. Level of practitioner interaction during Catherine's first phase.

diagnosed and remedied the problem she was having, in order that she might become a significant player in the online lecture. I have not played a teaching role, at all, in assisting her through this phase. For that reason, I have positioned the point that represents my level of electronic pedagogy outside of the community of inquiry at the extreme end of the student-centered end of Axis C (see Fig. 4.11).

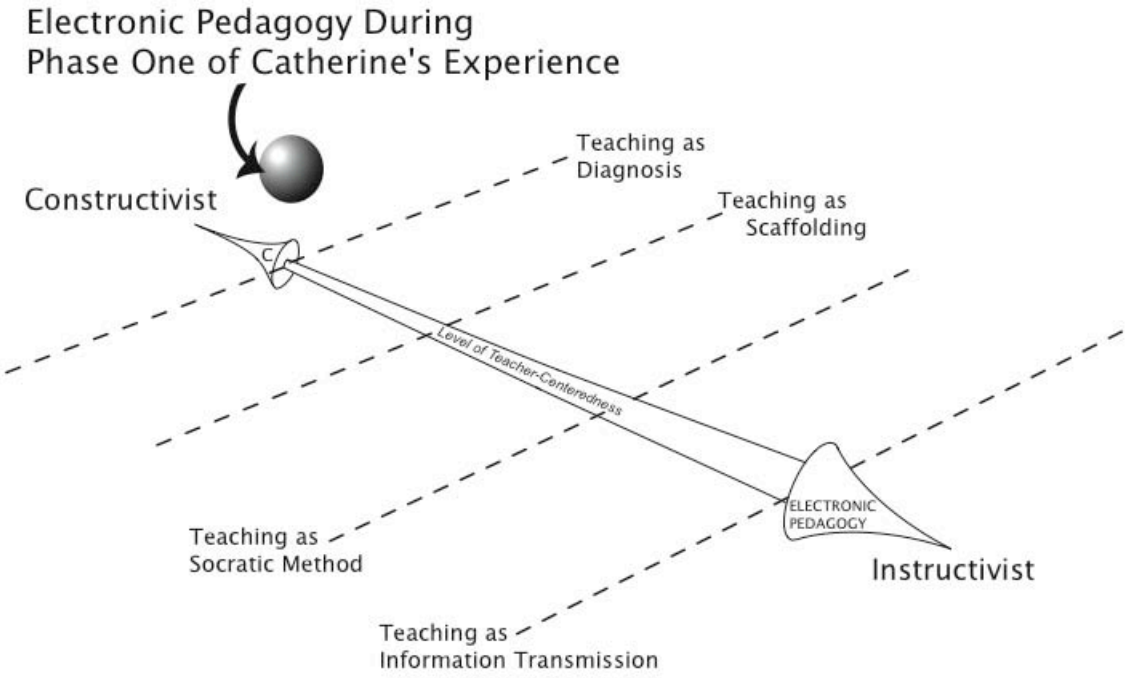

Fig. 4.11. Characterization of teaching strategy I used during phase one.

Figure 4.12 is a representation of Catherine's placement on the Map of E-Learning in this first phase of her experience with the online lecture. I show only one quadrant of the Map of E-Learning here, for clarity. Catherine worked outside of the community of inquiry primarily

because of the type of electronic pedagogy I used during the first phase of her experience. The point seen in Figure 4.12 is beyond the farthest space shown in this figure, and is therefore an outlier.

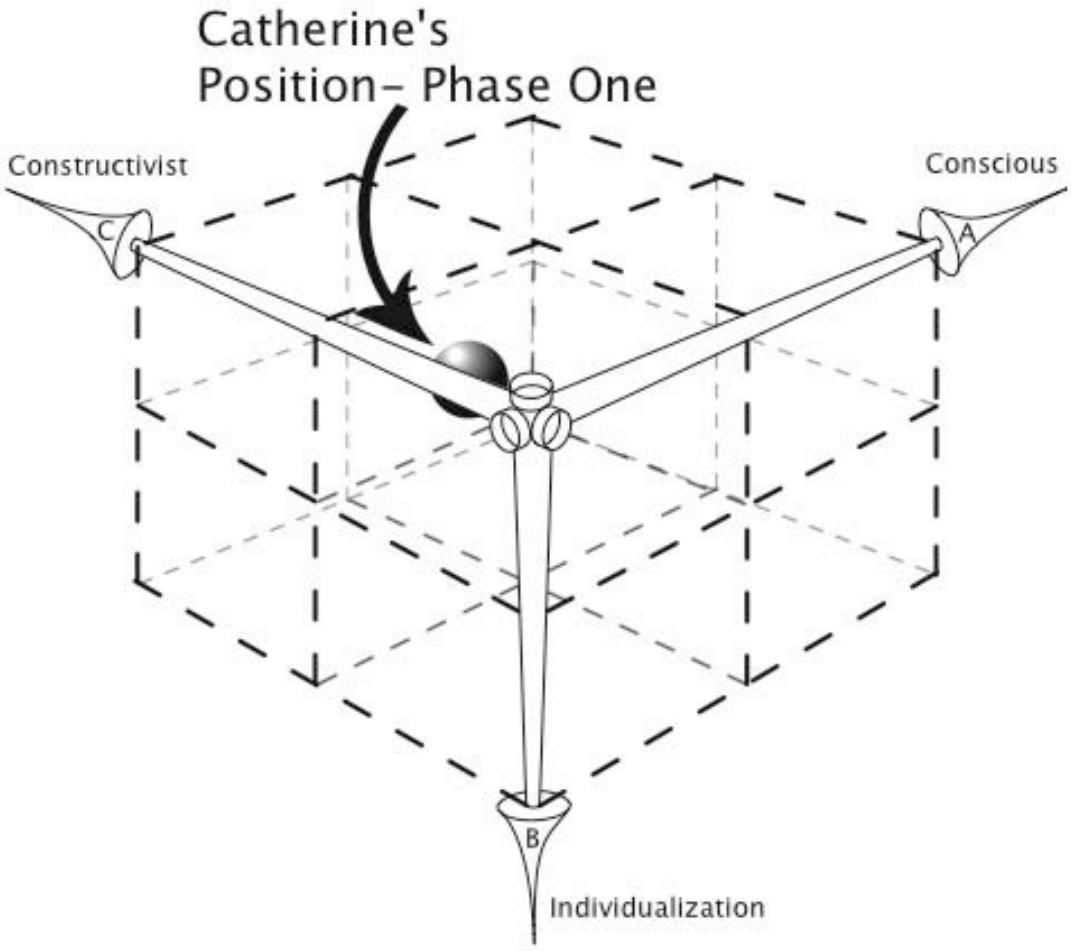

Fig. 4.12. Location of Catherine's experience during phase one.

Phase Two: Providing Guidance for Her Peers

The second phase of Catherine's experience with the online lecture reveals a student who is empowered by computer technology to speak on her teacher's behalf so that she might provide guidance for her peers. You will remember from the description of this phase of the online

lecture that students asked me questions. However, because I did not respond quickly, Catherine provided those answers. As the one who had charged the students (*albeit* tentatively) to conduct an online discussion about each other's art objects, I initiated an e-learning event and was thus responsible to oversee its successful initiation. The online students, as evidenced by Amanda's question about the location of the online discussion and Theresa's expression of her technological problems, looked to me as the authority in providing the direction they should proceed to conduct the work with which I had charged them.

To plot the point that best represents the second phase of Catherine's experience in the online lecture, I will begin by looking at my pedagogical strategy, as described by Axis C of the Map of E-Learning. I had relinquished my role as coordinator of the online discussion that I had

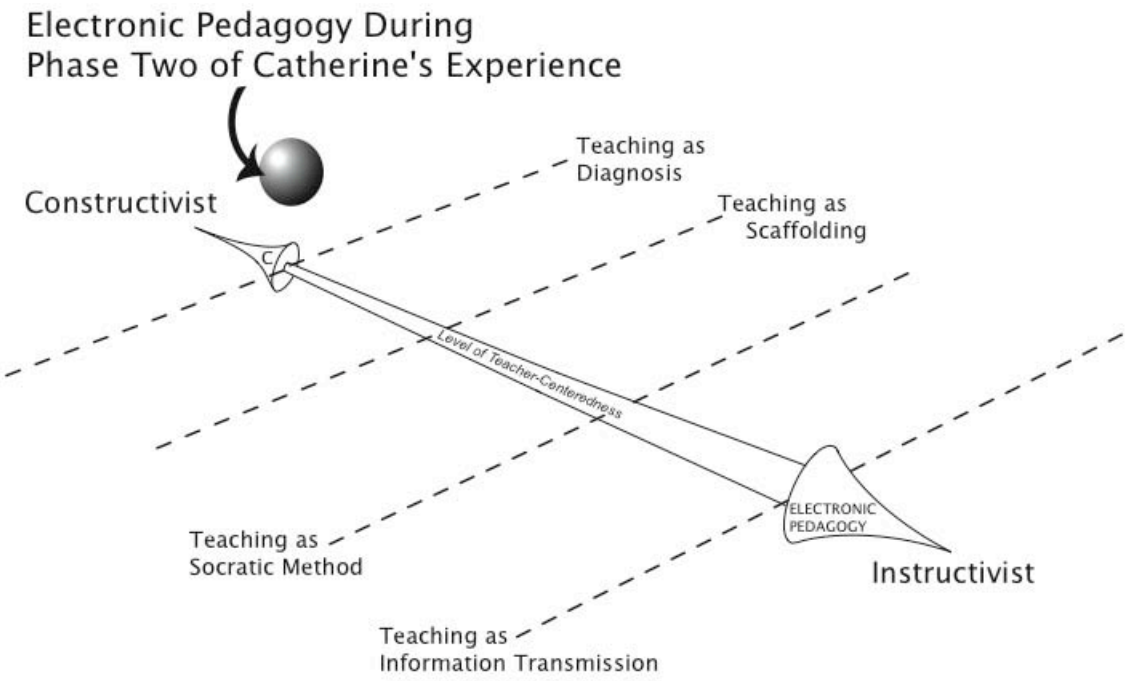

Fig. 4.13. Electronic pedagogy during phase two of Catherine's experience.

asked my students to have as the online lecture proceeded. Students took matters in their own hands to accomplish the e-learning event because of my pedagogical non-involvement with them. They did so, not in such a way as to resemble mutiny, but in such a manner that they preserved their mutual interests in succeeding in the online discussion. Like the teaching strategy I used in phase one, I chose to use an extremely student-centered approach that is beyond the *constructivist* realm of Axis C (see Fig. 4. 13).

That brings us, as we continue to work backwards in the investigation of this phase, to Axis B. Catherine positioned herself in such a way as to think in terms of the group. Her interaction with her peers determined how she moved through this second phase. She and her peers were working within an environment that fostered an intellectual apprenticeship. Catherine, as the more experienced partner in the cognitive apprenticeship that developed throughout this phase, is providing guidance at choice points in the e-learning event: once when Amanda probes with her question and once when Theresa shares her problem. Alternatively, she is in need of direction herself when she wants to proceed with the online discussion and looks to Chul and Travis's brief textual interchange for help.

Like the apprenticeship of old, there appears to be a more experienced partner in Catherine and a less experienced partner in her peers. Collectively, they are actively involved in solving the problem of conducting the online discussion. A quote by Rogoff, Malkin, and Gilbride (1984) comes to mind: "Information and skills are thus conveyed through the shared construction of the solution rather than through explicit freestanding directions on how to solve the problem" (p. 33-4). It is for this reason that I characterize Catherine's level of practitioner interaction as being at *Rogoff's apprenticeship in thinking* (see Fig. 4.14).

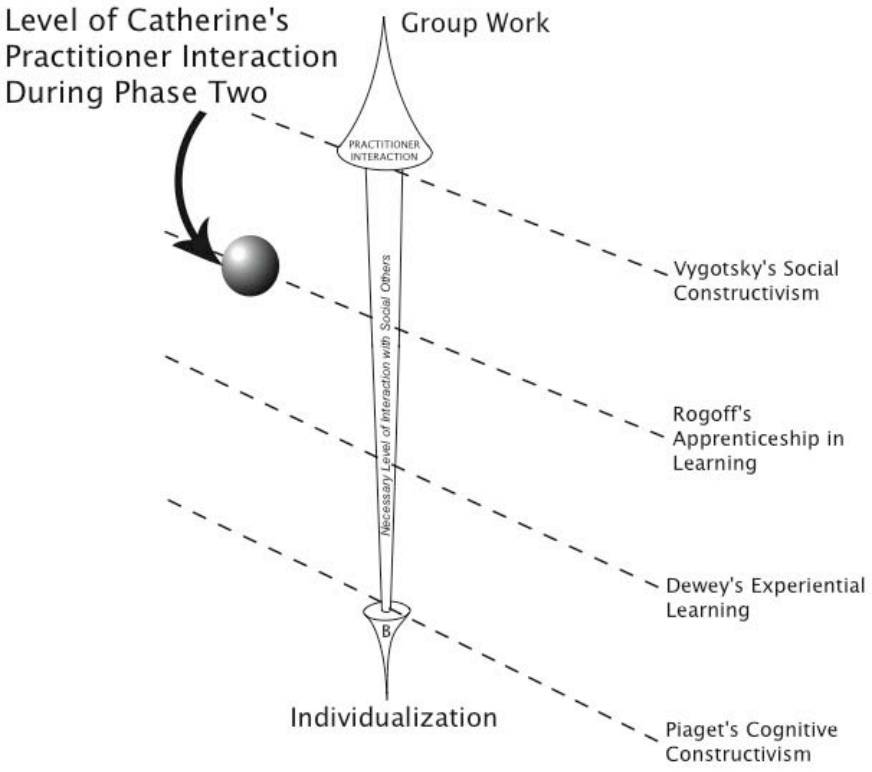

Fig. 4.14. Catherine's level of practitioner interaction during phase two.

I suggest the level at which Catherine was processing information in this second phase would most accurately be located on Axis A at the *analysis* level near the conscious end of the axis (see Fig. 4.15). I draw this conclusion most directly from her quick answer to Theresa. Catherine's dialogue with her concludes this second of her experience. In her response to Theresa, it appears that Catherine is conducting a type of error analysis, which is one of the five processes Marzano (2001) includes in his discussion of the third information processing function of analysis.

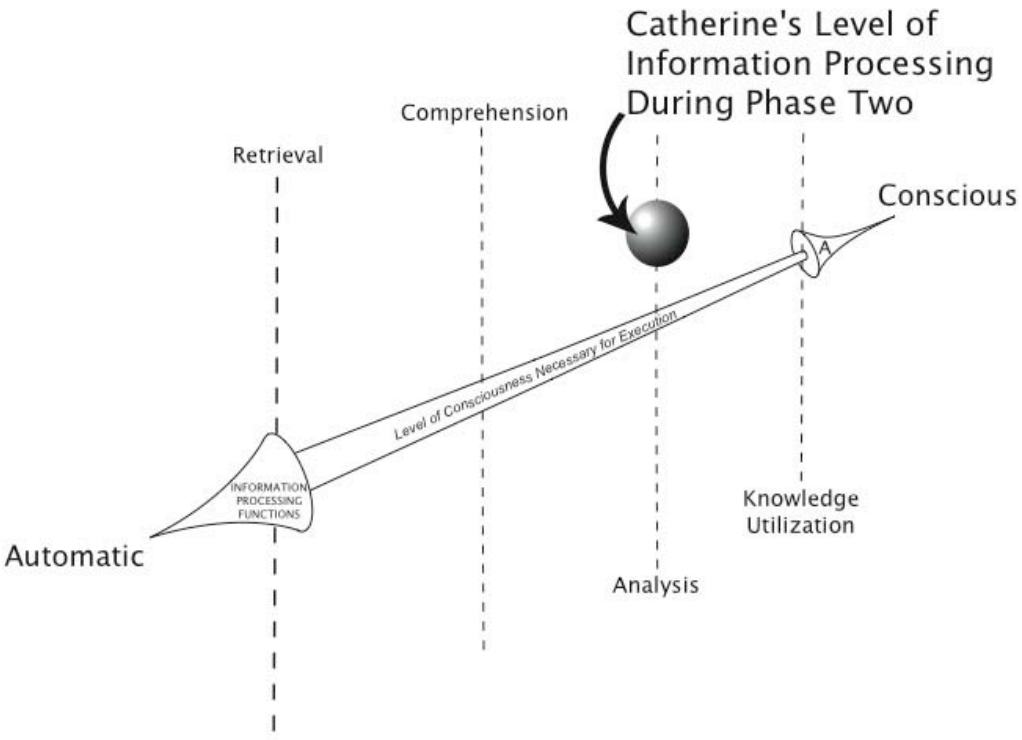

Fig. 4.15. Catherine's level of information processing during phase two.

There are two components needed for error analysis at this level. Catherine had successfully addressed both in this instance. She had first evaluated the information Theresa had presented her about the trouble she was having with the WebCT chat and looking at the JPEGs of the art objects. Her own experience with working through the same problem allowed her to evaluate Theresa's scenario. Therefore, as Theresa presented information about her situation, Catherine could judge the "correctness" of that knowledge with what she herself knew. Second, Catherine identified any errors in Theresa's reasoning about the way the WebCT chat was working (or not working) for her. By concluding that Theresa had drawn an incorrect conclusion about the cause of her technical difficulties, Catherine could quickly point out how Theresa needed to rectify the error.

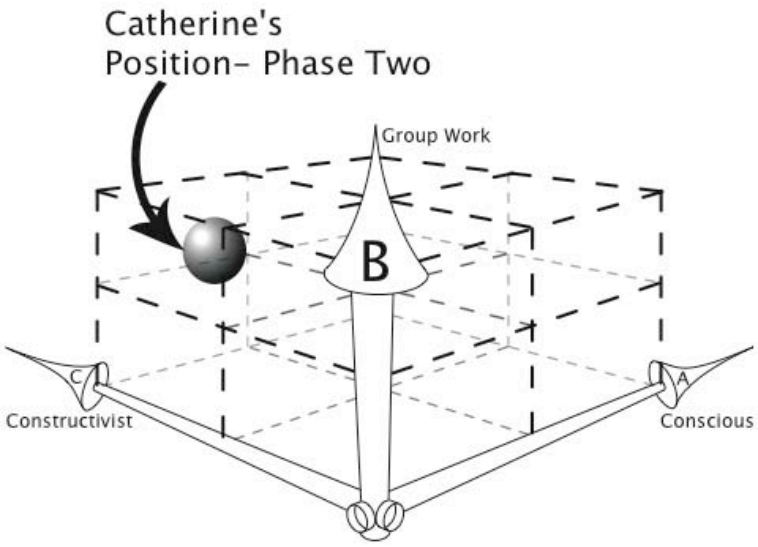

Fig. 4.16. Catherine's position on the Map of E-Learning, phase two.

The point shown in Figure 4.16 best represents Catherine's position on the Map of E-Learning for this second phase of her experience with the online lecture. Catherine's position in this second phase of the e-learning event has changed from her position in the first. She has moved from an individualistic mode of thinking to a type of thinking where she makes meaning of her experience through her interaction with a group of online peers. Due to my use of an extremely student-centered electronic pedagogy (that I consider to be *laissez-faire*), her position is still beyond the realm of the community of inquiry. Her level of information processing had shifted from knowledge utilization in the first phase to analysis here in the second phase; still, both required a high level of conscious thought.

Catherine's Empowerment in the Online Lecture

In Catherine's experience, it is important to note the way that she exercised a sense of empowerment. Her entire encounter with the online lecture was one that instilled a spirit of authority within her. This class session, for her, was not simply a matter of attending to information transmitted from a professor who had sole leadership over the direction of the lecture. Rather, it was a class where she felt that she was an equal partner in carving out the e-learning events. The students in the online group were empowered with the control that usually resides solely with the teacher.

Identifying factors that may lead to such a sense of empowerment is important. First, and foremost, Catherine's previous experience in e-learning played a role in her feelings of security in the online lecture. She had amplified confidence in her abilities because she was sure of herself, what she was supposed to be doing, and how she could do it. Second, Catherine seized an opportunity to lead when I presented one. She recognized that my involvement in the lecture hall discussion precluded me from answering the questions my online students were typing. Catherine's presence filled the vacuum left in the wake of my pedagogical absence. Third, Catherine was actively conducting the intellectual activity I had requested. Therefore, she was in the mind set necessary to provide technical support to Theresa. I was either unable or unwilling to stop what I was doing in order to troubleshoot Theresa's problem.

While these factors contributed to Catherine's empowerment during the course of this online lecture, the underlying reason for her success was her response to e-learning itself. She had taken hold of one of the fundamental properties of e-learning: "Learners are able to assume control and directly influence outcomes" (Garrison & Anderson, 2003, p. 115). Catherine had recognized that she was much more than one of the throng in this large university class. She

understood that she had a voice in the educative process, and she made her voice heard. In the same way that she directed others, she directed me as she urged me to show the class Jacqueline's art object JPEG. Her experience was one of unfettered freedom as she took the responsibility for her own learning when I unwittingly presented it.

As Catherine's empowerment demonstrates the promise of e-learning, my relegation of the varied and difficult duties of teaching online illustrates its potential detriment. Because of my failure to guide and direct my online students who, with the exception of Catherine, were newcomers to the world of e-learning, I was setting them up for failure. I should have remembered Garrison and Archer's (2000) advice for designing distance learning experiences. They remind us that there is a process for creating responsible and independent learners. In the beginning stages, it is wise "to construct the temporary scaffolding that will provide the support for students until they can assume greater responsibility for their learning" (p. 188). I would have done well to remember my own reliance on training wheels before I learned to ride my bike.

Implications for Teaching

I learned several lessons from Catherine's experience in the online lecture. First, I note the importance of having a more capable peer as a part of the e-learning event. In the first phase of Catherine's work, the more capable peer was Steve. His role was to assist and facilitate the online community that was developing throughout the online lecture. In the second phase of her work, Catherine assumed the position of the more knowledgeable peer as she assisted her classmates in their work. Both Steve and Catherine, at different times, acted effectively to bring other learners through the *zone of proximal development* (ZPD). Vygotsky (1962) discussed this realm as the cognitive gap between a learner's present knowledge and his or her potential level of understanding. A more capable peer is required to guide the learner upwards through the ZPD.

It is particularly important that I arrange to have a more capable peer available to the community of inquiry, especially in the beginning stages.

A second lesson I have learned from Catherine's experience with this e-learning event is about preparing online learners for this very different approach to learning. One of the most important parts of this online lecture required students to engage in multitasking. I charged students to view and discuss each other's art objects using the WebCT chat while they maintained a connection to the Horizon Wimba lecture and text discussion. I was essentially asking my students to establish their presence in two different online realms. They needed technical knowledge to navigate the technological constraints of this activity, and this was complicated because they had to attend to multiple tasks simultaneously.

Certainly, I could have provided the students with the technical instruction that they would need to occasionally multitask for their online work. As I pointed out in the previous section, I consider my teaching strategy during the second-phase of Catherine's learning experience to be one that was *laissez-faire*. I was unable to attend to providing the *scaffolding* necessary for most of my students. As scaffolding is "temporary support to develop higher cognitive skills" (Garrison & Anderson, 2003, p. 88), I should have given my students more assistance by providing them with basic instruction in multitasking.

A teacher should prepare students, if possible, during an introductory face-to-face meeting. Palloff and Pratt (2003) explain that one of the elements of a good orientation to online learning is instruction in Internet basics such as using a browser, accessing the course site, performing basic searches on the Internet, and using e-mail. While I did attend to several of these items in the orientation session, I did not provide instruction in the basics students would need to accomplish the activities I had planned for them. I did not fully capitalize on the goal of the

orientation, which should be "to maximize the educational potential for both the online classroom and online student" (Palloff & Pratt, 2003, p. 66).

Perhaps the most important preparation I could have provided, in terms of the multitasking students needed to perform during the online lecture, was in learning how to think and work differently in utilizing the computer as a tool. John P. Cuthell (2002) discusses the way that the use of computers enables people to think differently:

> So computers are the tool, the vehicle for combining motor skills, language, images and symbolic manipulation through practical activities. These practical activities reflect a series of often complex thought processes. They represent a cultural tool that enables the mediation of thought. The technology enables these processes to be amplified and developed in ways which reflect the integration of technology. Fast multi-tasking has become one indicator of this integration. (p. 87)

I should have helped students see the limitless possibilities of their own work using the computer by giving them practical orientation activities that they could utilize in their online coursework.

Vignette #3: Ellie's Confusion

Video Journal Entries: June 20th and 28th, 2004

> *I have a laser pointer that I usually use to point out things on the slides I am showing to my students in the lecture hall. I realized that my online students could not see what I was doing with that laser pointer because, of course, they could not see it. Then, I thought my students online could see the mouse pointer. So I began, at that very instant, using the mouse to move the cursor around the computer screen as I pointed things out to my online students. But…they can't see that either. What I really have to make sure I do is annotate the slides with the Horizon Wimba E-board. And I am reminded now that a choice like that is something that is a very subtle decision an educator must make to ensure that his students can actually see what he is referring to as he teaches.*

Getting Online

Today, in her apartment, Ellie is preparing to participate in the online art appreciation class. She had really enjoyed the first Horizon Wimba session on Monday, and felt like she had gotten the hang of the way she needed to use the computer to participate fully in the class. She

logs onto the Horizon Wimba site only to find that, like Catherine, she could not hear any sound. Ellie, like Catherine, had tried several different operations to fix her audio problems—unsuccessfully.

She tried to wait patiently, and only occasionally sent in a textual reminder that she was still in need of some help. Something she wrote about nine minutes into the class got Steve's attention.

ellie_smith mine says 404:Not Found

Steve, sensing she was on the right path, finally addresses his written comments to her.

steve_harris ok. ellie, right click on it and select plugin settings

She quickly obeys, and responds with the first of many shorthand messages she would send throughout the class session.

ellie_smith k

steve_harris you should have a new box open. select streaming transport from the drop down menu

ellie_smith k.. did that

steve_harris now select use this protocol and port id

ellie_smith k...

steve_harris and then select use HTTP Port ID 80

ellie_smith k

steve_harris ok now close the quicktime settings box, go to the lobby and come back in. it should refresh the audio for you

Ellie quickly did so. She was thrilled to hear my voice come ripping through the speakers. Her face brightens as she turns down the volume on the computer speakers and pecks out an excited message.

ellie_smith yay!!! thanks so much, i got it

With her computer woes behind her, Ellie could fully delve into the art appreciation lecture that was already in full swing. She could tell that I was discussing the ways that form and content work hand-in-hand to allow the viewer to make meaning from works of art. Immediately she opens her *Artforms* textbook, and quickly finds the section about form and content in Chapter Two so that she could follow along.

Almost as soon as she had oriented herself to the lecture and the text, I was moving on to another topic. She hears me say, "While form and content are two very important ways to discover the meaning of an artwork, the signs and symbols within that artwork also provide many clues. A study of these signs and symbols is called iconography."

The Devil's in the Details

With one hand on the mouse and the other on her textbook, Ellie turns the page to behold a large full-page reproduction of Albrecht Durer's *Knight, Death, and the Devil* (see Figure 4.17). The beautifully rendered image of an otherworldly scene drew her immediately. She could easily picture the early Renaissance time portrayed in the print. The stately knight, replete with ornamental full-body armor and lance, rides a beautiful, powerful horse. Together, they dominate the pictorial space.

Ellie turns her attention to her computer screen, where she sees the PowerPoint slide that I have just "pushed." It contains an image of the Albrecht Durer print. She glances from the computer screen to the printed image in her book and back again. What is this? She stares at the

Fig. 4.17. Albrecht Durer. *Knight, Death, and the Devil*. 1513. Engraving.

two ghastly, grotesque figures that lurk behind the knight. She leans forward in her desk chair, craning her neck to get a close-up look at one of the figures. She scans the work, looking for objects that Durer might have used as symbols. She sees the little plaque at the bottom left hand corner of the print. It looks like a map, or something like that, to her. Perhaps it is significant.

ellie_smith whats that thing right in front of the skull?

jason_foster map?

As I entertain other responses from the students in the lecture hall, I reply rather shortly.

robbie_quinn it is a signature of the artist

ellie_smith oh

She feels defeated, even though she had indeed discovered a symbol (*albeit* that of the artist). Nevertheless, she continues to scan the picture for other symbols. She sees the dog striding purposefully beneath the horse. The class has already commented about it. She sees a little lizard slithering on the ground toward the bottom right hand corner of the image. She could not think of anything that it might represent. Her eyes move slowly up the page, avoiding looking to closely at the two frightful creatures in the center of the page. Then she sees, ever so faintly rendered, what looked to her like a castle or a city at the top of the hill way off in the background.

At that very moment, she hears me say, under the suggestion of an inaudible student voice in the lecture hall, something about some object in the background. "Okay, yeah, we can take a look at that. You can see here in the background this form here." She wonders if I was gesturing to the castle-like object. *Oh, if only I could see what he was talking about!* she thinks to herself. "What might that be? Can you make it out?" I continue.

Ellie hesitates for a moment. She thinks she has a good answer, and even a suggestion as to what the castle might represent, but she does not want to respond about something that the class was not currently referring to in their discussion. She does not want to appear as if she was not paying attention, because she really was. While she tries to make up her mind, she could hear me reiterating some of the suggestions of the lecture hall students.

"Okay, maybe it's a castle, that's a good idea" she hears me say. "Or maybe it's a representation of heaven." She hears me pause. "Okay, yeah. Maybe it's some kind of holy city, of some sort." Ellie could have kicked herself. She had missed her opportunity to make a good contribution to the discussion. There was one more thought she had about what this object might be.

Right as she was about to type it out, she sees that Damon submitted a simple and quick suggestion.

damon_henson village

He had stolen her thunder. She hit the backspace button on her keyboard to erase the V-I-L she had typed, and taps her fingertips on her tiny wooden desk. She was always one step behind the rest of the class. She longs to be an active participant in this discussion; but technical difficulties, delusions, and confusion constantly thwarted her efforts. I continue to question the students about the city in the distance, probing them to offer suggestions about what it might symbolize.

I quickly turn the class's attention to an investigation of the implied movement of the knight and his horse. "Do you think the knight's headed toward this city, or is he headed away? And, how do you know?" I ask. After reiterating one of the ideas offered by one of the lecture hall students, I read Sarah's online chat comment.

sarah_morello i think he's heading away

travis_phillips i agree

tara_mckelvey me too

Always attentive to the smallest detail, Ellie remembers that my question had two parts. Since the others had been so swift in answering the first part, she realizes she could contribute to the discussion by answering the second.

ellie_smith maybe it's Heaven and the devil is keeping him away from it

She is so happy to have made a significant contribution. She concludes that the figure on the left, who confronts the knight to his face, is the devil. Her interpretation is well-supported, she thinks, because of the way this figure's horse seemed to be blocking the knight from continuing up the path to the heavenly city. Theresa's immediate confirmation buoys Ellie's sense of confidence.

theresa_dunn i agree ellie

However, her level of certainty instantly plummets when she hears me address one of the lecture hall student's questions. To Ellie, it was apparent that the lecture hall student had asked me to clarify the identity of the two figures lurking behind the knight. She couldn't quite make out exactly what I was saying, but it sounded like, "Oh, this guy here? Yeah, that's the devil there." *Where is Mr. Quinn pointing?* she wonders. "See his horn?"

She could see pretty clearly that the figure on the right had a horn. One, large horn protruded from the figure's head. *Okay*, she thinks, *Mr. Quinn must be saying that the figure on the right is the devil*. As soon as she had been convinced, she hears me say, "Yeah, and this is death here." Now, she was really confused. *What's Mr. Quinn pointing at now?* she wonders.

"When we had been looking at the symbols in this work, we saw that he was holding this hourglass. Like death was this impending doom." I continue saying. Ellie thinks she has it straight now. Maybe now, finally, she can continue in some confidence. Just then, I switch gears.

"It's interesting that you guys have looked at this figure behind the knight with some puzzlement," she hears me say. "I mean, why is that not really saying devil to us here in the twenty-first century?" I chuckle. "What do we normally picture the devil as?" To Ellie, this unambiguous question seems to provide a good opportunity for her to make a written comment. Before she can do so, however, several of her online classmates jump on the opportunity.

chul_lee only one horn

I began, reiterating one of the lecture hall student's ideas. "Okay, like…he's got the two horns, right? Okay. What else?"

travis_phillips not 2 horns and the spear

"Okay, he's got a pitchfork," I agreed. "What else?" Tara, getting ahead of herself, mistakenly writes:

tara_mckelvey and he's in white

tara_mckelvey not a dark color like we're used to

"He's got this forked tail. Okay. What else?" I continue, entertaining another suggestion from one of the lecture hall students. "He's more human-like, maybe. Okay. Interesting points," I conclude.

It was instantly clear, at least to me, that we are talking about the same concept of the difference between this Renaissance depiction of the devil and our contemporary conception of the same entity. However, we are talking about the difference from two angles. The lecture hall students are offering suggestions about the characteristics the common twenty-first century conception of the devil possesses. The online students are talking about the way that Durer's depiction of the devil in this work differs from that common twenty-first century conception.

I want to clarify the idea I was trying to make through this discussion because it is important that my students know how iconography can help us understand what certain works of art mean, particularly in reference to the cultural norms of those who would be viewing those signs and symbols. "For Durer's time in Northern Europe during the 1500s, this is the standard idea of what the devil was. You know…and those who looked at Durer's picture in that day and age would have had a very clear understanding about what that represents. The devil for them was this sort of goat looking kind of creature with this one, solitary horn in the middle of his head."

While I am lecturing, Ellie finds herself confused again. After reading Tara's last errant comment about the figure on the left, Ellie is trying to reconcile the disconnect between the way the lecture hall discussion is going and the train of thought her online peers are following. She hesitates for a second, unsure of herself for what must have been the fourteenth time today. Then, she follows Tara's misdirection.

ellie_smith but his hair looks like it has snakes comin out of it

Ellie hears me say "Go ahead," and then there is silence. It sounds like I must be trying to listen carefully to some comment a lecture hall student is making. A moment later she hears me say, rather enthusiastically, "Ah ha!" Then, another text message pops up in the Horizon Wimba chat. It is from Rita.

rita_mclendon like medusa

Ellie finds the reference to this feminine Greek titan somewhat ironic, since she assumes the figure in the artwork is a man. Utilizing the standard online shorthand expression for *laugh out loud*, Ellie writes:

ellie_smith yeh, lol

amanda_pickins it does look like medusa

By this point in time, I begin summarizing the idea that the lecture hall student had shared. I had found it so interesting. Ellie can tell I am excited because of the way I am raising my volume, causing some vocal distortion. Nevertheless, she can hear me saying, "How interesting! How interesting! Jenny has made a point that really hits the nail on the head, here. This little guy behind the knight is a take-off from the Minotaur."

Travis, another one of the online students, had been slightly annoyed at the way Tara, Ellie, Rita, and Amanda had commandeered the Horizon Wimba chat through their off-kilter discussion of the artwork's two demonic figures. It was clear, to him at least, which figure represented which entity; the figure on the left was death, and the figure on the right was the devil. Immediately, he writes what seems like a reprimand.

travis_phillips they are talking about the creature behind the knight

I could almost see his eyes rolling back in his head as he submitted this comment. My continuing discussion of the figure on the right bolstered him. I continue, "In the Renaissance time during

which Durer was working, representations of the devil were very similar to what the Minotaur looked like to the Ancient Greeks. So, that's the way that Durer is tying into a cultural tradition of artistic representation of this entity: the devil."

Ellie could tell that I am finished discussing this work of art, but she is still so flustered. Her questions remain. Which figure is supposed to be death? Which one is the devil? What are their positions in the image? In a final plea for clarity, she writes:

ellie_smith r they talk about the guy to the left of the knight or right?

She feels like she could cry. Tricia's response is quick.

tricia_johnson right

Ellie gasps.

ellie_smith oh

Elucidating Ellie's Confusion

Ellie's confusion was a result of my lack of specificity in the material I was discussing. I was quite oblivious to my error until I reflected in my video journal on the events of the online lecture. Ellie, in an effort to overcome this shortfall, was vigilant in her pursuit of an accurate understanding of the work of art that provided the focus for the online lecture. The Map of E-Learning illuminates the dynamic processes that are at work in Ellie's experience.

Ellie's Position on Axis A, Information Processing Functions: Analysis

First, Axis A provides a view into the type of information processing function that Ellie was taking advantage of as she worked through my discussion of the Durer print. Throughout the e-learning event, Ellie was rigorously analyzing the information she was receiving (or not receiving) from me in comparison with the visual information she saw on her computer screen. She was receiving information from my spoken words, from her visual perceptions of the work

of art, and from her online peers' text chat.

The analytical process Ellie was using to integrate the many sources of information is *matching* (Marzano, 2001). The type of matching she employed is not simply the automatic recognition of similarities and/or differences between two objects. Rather, it required her to process her comprehension of multiple sources of information by specifying the points on which these bits of disjointed knowledge must be analyzed and reorganizing the information within new thought structures. This entire process is undertaken so that the information provides new insights into the object or objects under investigation.

I presented Ellie with a complex task. She was to discern between the verbal and textual information she received via Horizon Wimba and the information she gleaned from her own intense investigation of the artwork. As I described portions of the artwork with vague and out of context references, she was forced to process her newfound knowledge to make sense of it. She heard me lecture about the iconographic use of the figure representing the devil *at the same time* that Tara issued a misinformed comment about the figure representing death. Her own visual reading of the artwork was informing her developing thoughts; however, the thoughts of her peers confused her. Additionally, Ellie felt mounting pressure to quickly process this information so that she could get credit for participation in the online lecture.

Ellie attempted to complete her analysis by isolating her matching process to a singular characteristic. She asked her peers about the actual location of the figure. Tricia's definitive answer provided her with the conclusive attribute she needed to analyze the information. By matching the figure on the right with all of the knowledge she had taken hold throughout the ordeal, Ellie came away with a clearer understanding about the iconographic representation of the devil in this sixteenth century work of art. Therefore, the level of information processing at

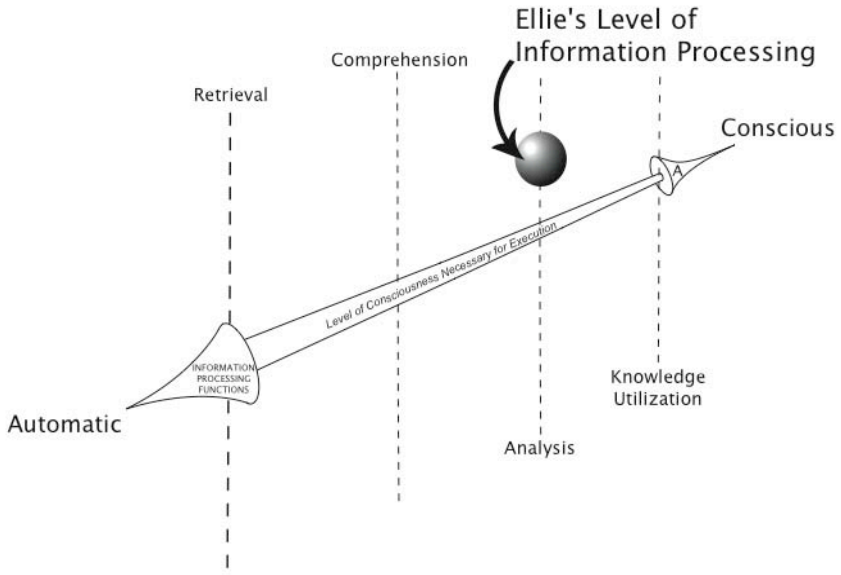

Fig. 4.18. Ellie's level of information processing during the online lecture.

which Ellie was operating would most accurately be the *analysis* level on the conscious end of Axis A (see Fig. 4.18).

Ellie's Position on Axis B, Practitioner Interaction: Experiential Learning

Concerning the level of practitioner interaction at which Ellie was operating during this e-learning event, a look at Axis B is helpful. In her navigation of the online lecture, Ellie provides us with a picture of the dual components of Dewey's (1933) reflective thinking. Dewey notes: "that *reflective* thinking…involves (1) a state of doubt, hesitation, perplexity, mental difficulty, in which thinking originates, and (2) an act of searching, hunting, inquiring, to find material that will resolve the doubt, settle and dispose of the perplexity" (p. 12). In Ellie's case, the first component of doubt was set in motion and perpetuated throughout much of my nonspecific discussion of the work of art, as evidenced by her constant bouts with confusion. The second aspect of reflective thinking intermingled with these periods of doubt. She tried to resolve her confusion by asking questions to help process the information. The disclosed location of the

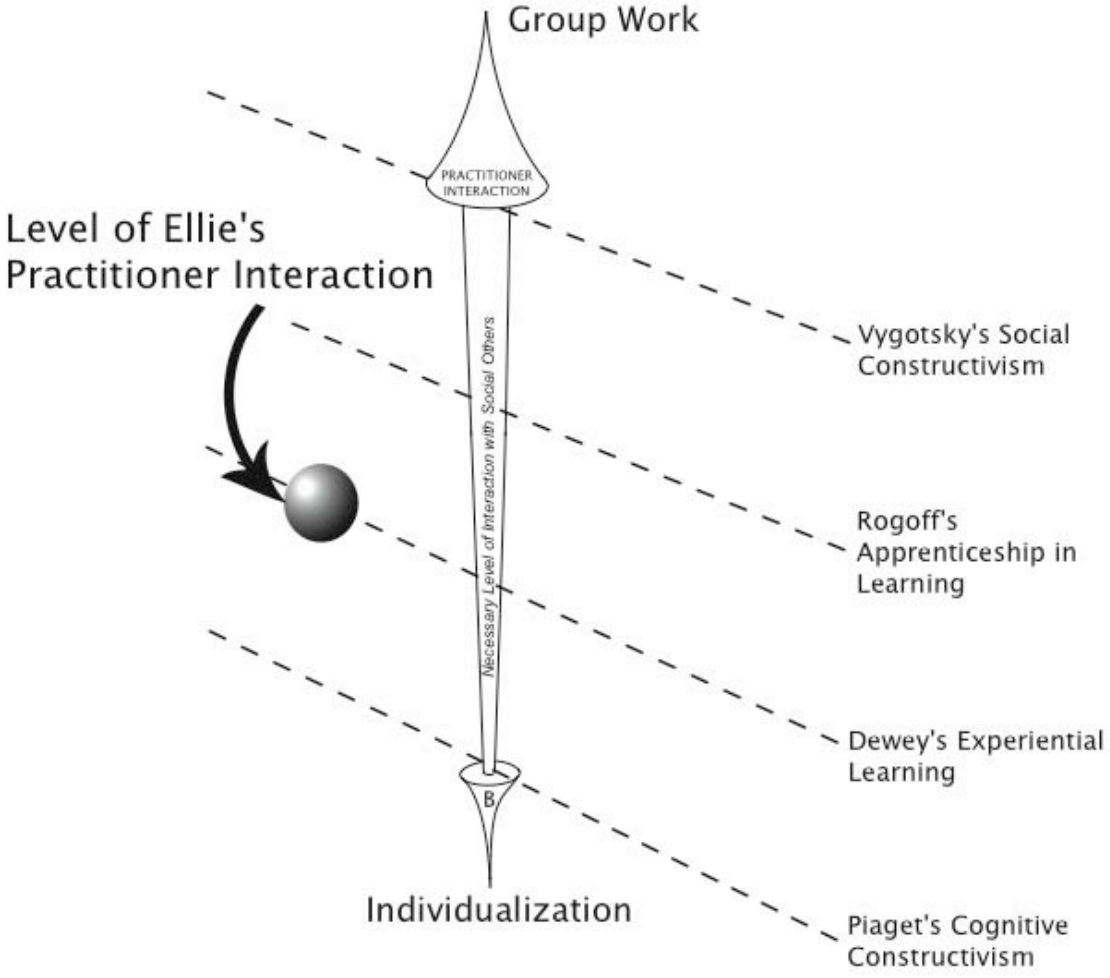

Fig. 4.19. Ellie's level of practitioner interaction during the online lecture.

figure allayed her perplexity. Because of Ellie's reflective thinking in this event, I characterize her level of practitioner interaction as *Dewey's experiential learning* (see Fig. 4.19).

Ellie's Position on Axis C, Electronic Pedagogy: Socratic Method

For an interpretation of the pedagogical strategy I used in the online lecture and its role in Ellie's experience, we turn to Axis C of the Map of E-Learning. The portion of the online lecture providing a backdrop for Ellie's story is a straightforward example of the pedagogical strategy, *teaching as Socratic method*. Using this strategy, I had a prescribed series of questions that I

posed to the students. The goal of my questioning strategy was to lead students to a predetermined end; in this case, to an understanding of the role that iconography plays in works of visual art. I asked questions so that students like Ellie engaged with the discussion as I guided them through what I considered the important points of the topic under investigation. Although I primarily used questions to advance the discussion, I often mingled portions of information transmission into my Socratic dialogue. Therefore, my pedagogical strategy exists in the space between the two stations on the instructivist end of Axis C (see Fig. 4.20).

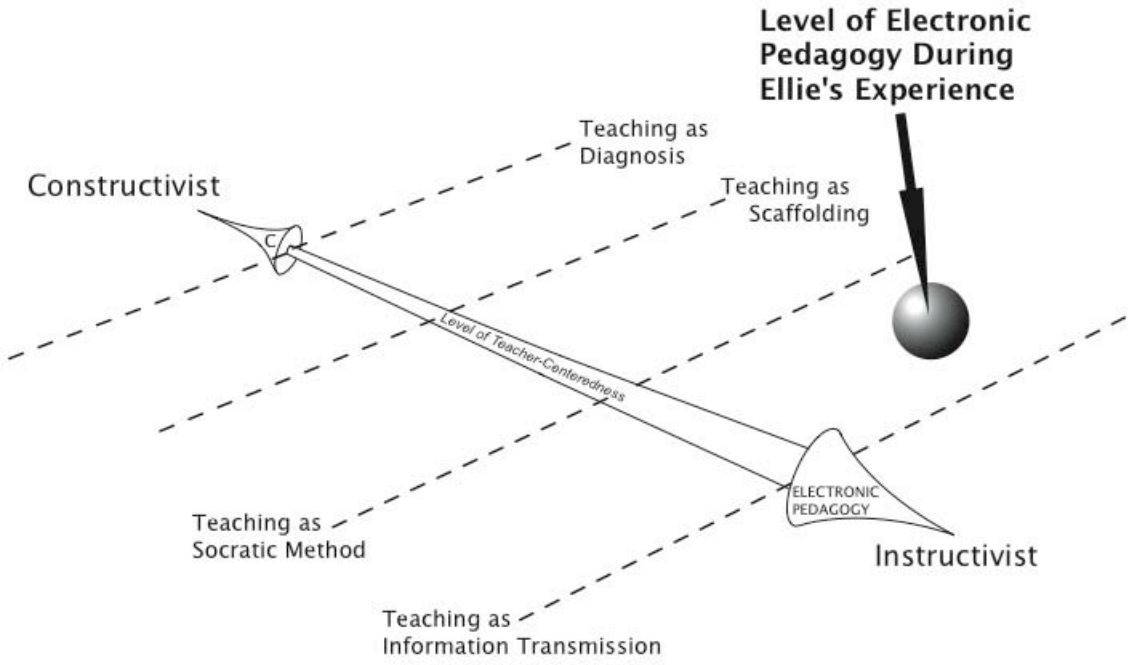

Fig. 4.20. Level of electronic pedagogy in Ellie's experience.

I suggest the point that most accurately represents Ellie's position on the Map of E-Learning, then, is in Figure 4.21. Her position on Axis C is in between the levels representing the two pedagogical strategies I utilized in the online lecture. In terms of Axis A, her experience falls

directly along the level of *analysis*. The point also aligns with the level of *Dewey's experiential learning* on Axis B. Of the three students, Ellie was the only one within the community of inquiry, as demarcated by the Map of E-Learning, during the online lecture. I discuss the significance of Ellie's position within the community of inquiry in the upcoming section.

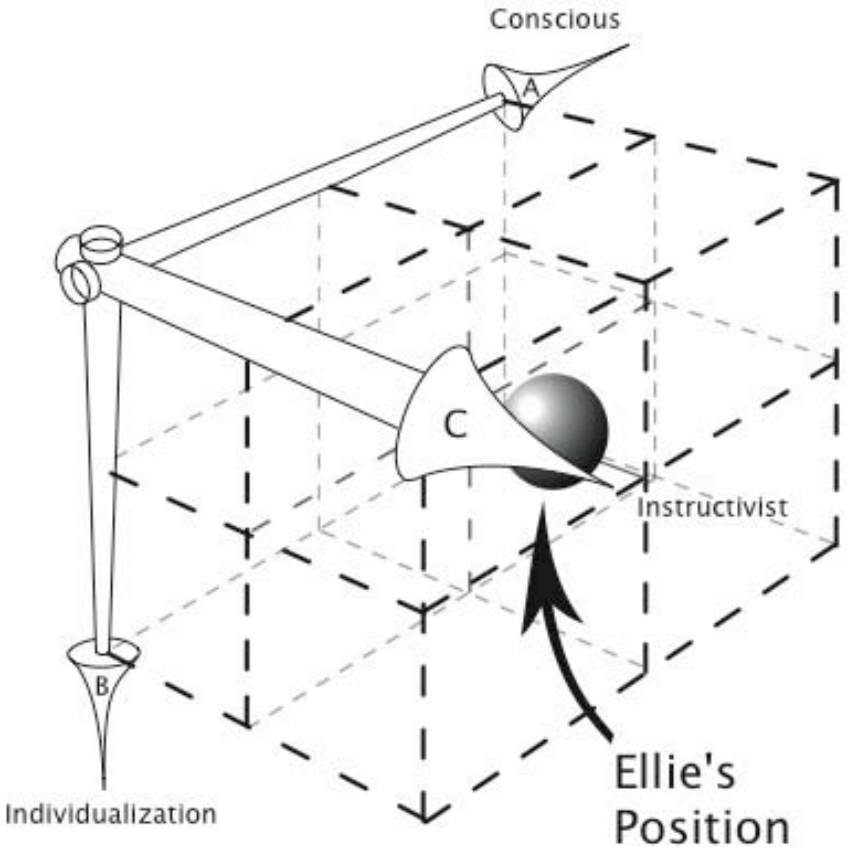

Fig. 4.21. The point representing Ellie's position on the Map of E-Learning.

Assessing Ellie's Derailment

In evaluation of Ellie's experience during the online lecture, it is important to note her seemingly futile efforts against confusion that manifested itself in her attempts at engaging with

my discussion of the lecture material and in her dialogue with her classmates. She tried diligently to remain involved in the online lecture, as evidenced by her responsiveness to questions posed to the students. However, her responses were plagued with vestiges of the confusion that so wholly dominated her learning experience.

Paradoxically Ellie's experience with the online lecture, as plotted on the Map of E-Learning, was firmly within the community of inquiry. As she processed the lecture information, the thinking of her peers caused her to consider alternative points of view. It is remarkable, then, that she could remain "in the dark" throughout so much of the e-learning event. There are several reasons why confusion dominated Ellie's experience.

Ensuring Clarity in Cyberspace

I was grappling with the way that I was using Horizon Wimba for my online lectures. I knew the clarity of my vocal presentation, in reference to the visual information the students saw on their computer screens, would determine the effectiveness of the online lecture. Yet, I did not fully understand the most effective way to establish this link for my online group.

To achieve clarity in communication, particularly when using an online lecture, it is crucial that specificity reigns supreme. Even a tiny amount of ambiguity in a conversation can quickly snowball into a massive misunderstanding. Palloff and Pratt (1999) remind us of the importance of clarity in online learning as it pertains to the use—or misuse—of humor in e-learning. Without the body language to accompany them, jokes and sarcasm can easily be mistaken as offensive or rude comments. The use of humor in e-learning can readily contribute to a hostile online learning environment. Furthermore, careless use of humor can isolate learners, frustrating the group's efforts at establishing an online learning community (Garrison & Anderson, 2003).

Misconstrued emotional content, such as humor, is not the only possible hindrance in achieving clarity in online communication. Vagueness will confute any strides one might make toward holding an accurate and well-defined discussion in e-learning. The success of such a discussion hinges upon the pedagogical practice of the teacher. A teacher's use of specific language, particularly when utilizing an online lecture, will help ensure that all participants are confident in the information they are receiving. Then, when the opportunity to discuss this information arises, students can be sure that they are speaking about the same topic.

The use of more specific modifiers is an important pedagogical practice that a teacher must use to relay information to his or her students in the online lecture. Instead of using words like "this" or "that," a teacher should specifically refer to the topic under examination by using phrases such as "this period of history" or "that algebraic formula." This practice is crucial when a visual object is the subject of the lecture, as it often was in the art appreciation class. In the Horizon Wimba lectures, the online students could hear me refer to the PowerPoint slide image they saw displayed on their computer screens. They could use the spoken information to guide them as they investigated the visual information. In this manner, I could relay art historical information about the artworks they were viewing. I could also lead them through an in-depth look at the work of art itself by directing them to look a certain parts of the image.

I quickly became aware that it was essential to maintain a connection between what I was saying and what the online students were seeing. I was certain that the connection was a necessary component for successful online lectures about art objects, but I was confused about the best way to make the link. Throughout the course of the six Horizon Wimba sessions conducted in the online art appreciation class, I tried several techniques that I thought would be

the solution to the dilemma. This process of trial-and-error eventually resulted in success, as I finally understood the importance of using modifiers that are more specific in online lectures.

Ellie's confusion was exacerbated to my lack of specificity in the online lecture. The initial cause for the ambiguity with which Ellie perceived the lecture material is the lack of body language in the online classroom. Without the visual clues that accompanied much of my discussion of the work of art throughout the Horizon Wimba session, Ellie perpetually wondered to what I was referring. Clarity was largely absent from the online lecture. The lecture material needed modifiers that were more specific. Instead of making general comments like "Yeah, that's the devil there," I should have used phrases like "The devil is represented by the one-horned figure located on the extreme right portion of the composition." This use of a very specific and pointed referent would have alleviated much of Ellie's confusion.

Using Technological Tools in E-learning

My careful choice of language is not the only method I could have used to promote clarity during the online lecture. Another technique I could have used involves the tools provided by the Horizon Wimba presentation software. Horizon Wimba not only displays the PowerPoint slides, but also allows the instructor to annotate the slides using the Horizon Wimba E-board tools panel (see Fig. 4.22). The Horizon Wimba E-board tools panel is just one of the features available for an instructor who wants to move the online presentation beyond the standard, static use of the PowerPoint slides. (For a full explanation of the use of the E-board, see the Appendix B.) I could have utilized the E-board to direct the students' attention to the exact area I was discussing during the online lecture.

Fig. 4.22. The E-board tools panel of the Horizon Wimba interface.

Engaging in Second-level Narrative

While Ellie's confusion was due in part to my lack of specificity and failure to utilize the technological tools at my disposal, there is a less salient aspect of her experience during the lecture that merits some discussion. Ellie found herself carried away in a different direction than most of her peers as she engaged in a brief discourse with Amanda, Tara, and Rita. The students collaboratively carried on a brief conversation that was on a different level than the one that I was trying to encourage. As I was lecturing on the iconography of Durer's engraving, an authentic second-level narrative was occurring in the online text chat. These four girls were making sense of a visual image in a way that was different from the manner in which I was instructing them to do. They spiraled out of control, briefly, as they followed Tara's errant comment. Then, in the clutch, one of their classmates pulled them back into the realm where the

rest of us were operating so that they could successfully conclude this online lecture in a more meaningful way.

While Tara and her cohort were making meaning in their discussion, they were not making the best inferential meaning. Their act of connecting the figure of death to Medusa was an act of engagement and meaning making, just as connecting the figure of the devil to the Minotaur was. Their activity and Travis's subsequent response, provides an example of the individual and consensual nature of meaning making.

The community of inquiry worked to support the girls' development of knowledge by guiding their unskillful derivation of inferential meaning to a more skillful one. Deborah Loewenberg Ball (1993) attests to the importance of such a community in the construction of mathematical knowledge:

> Because mathematical knowledge is socially constructed and validated, sense making is both individual and consensual. Drawing mathematically reasonable conclusions involves the capacity to make mathematically sound arguments to convince oneself and others of the plausibility of a conjecture or solution. It also entails the capacity to appraise and react to others' reasoning and to be willing to change one's mind for good reasons. Thus, community is a crucial part of making connections between mathematical and pedagogical practice. (p. 376)

Unlike mathematics, arriving at the "right answer" in art is oftentimes impossible. Much of our understanding of art forms at the intersection where we make meaning as individuals and a society. That intersection is where Ellie and her peers were steered in a better direction.

Judging Ellie's experience with the online lecture, as well as my pedagogical effectiveness, is a difficult task. This is particularly true when I try to find balance between the success of Ellie's inclusion in the community of inquiry and the three hindrances to her learning experience: my lack of specificity, my failure to annotate the slides, and the second-level narrative in which she engaged. My pedagogical techniques contributed to Ellie's confusion

more than they alleviated it. The group cohesion engendered by the use of the online text chat supplemented my teaching techniques. As students were navigating the content together, they assisted one another with a deeper level of knowledge generation. This co-construction of knowledge occurred frequently with a simply phrased reminder from a classmate, as in the case where Will reminded Ellie and her cohort about the subject we were discussing.

The process within which Ellie's experience took place is just one of the many outcomes of the use of collaboration made possible in the Horizon Wimba online lecture. Palloff and Pratt (2005) remind us that: "When working in small groups, teams, or even on the discussion board of an online course, the ability to create knowledge and meaning is enhanced" (p. 6). Collaboration in an online lecture appears, at face value, to be paradoxical. The teacher-driven mode of instruction embodied in an information transmission approach such as the lecture is antithetical to a truly collaborative learning experience. However, because of the use of interactive computer technologies in the lecture I conducted, the e-learning event took on a collaborative nature as students bounced ideas off one another using the text chat dialog in which they engaged throughout the course of the online lecture.

Implications for Teaching

The collaborative nature of e-learning manifested itself in Ellie's experience during the online lecture. Students constructed meaning together, in spite of my teacher-centered pedagogical strategies of information transmission and Socratic questioning. In one instance, the meaning made by one group of students was inaccurate. Thankfully, the community of inquiry worked to guide the wayward students toward an experience that was educative, rather than miseducative (Dewey, 1938). However, the event raises important questions. If students construct knowledge on their own, will their knowledge be structurally sound? How do we allow

for the collaborative ventures of e-learning while maintaining a system that works to correct situations where false knowledge is constructed? What happens when the community of inquiry fails to catch inaccurate learning?

These questions require answers that speak to the balance necessary in teaching and learning online. Like the traditional teacher, the online teacher must carefully decide when to provide direction and when to let students discover important lessons on their own. The decision is one over which many educators have labored. Deborah Loewenberg Ball (1993) discusses her turmoil in arriving at balance in the mathematics lessons she conducts with her third graders:

> How much "stuckness" is productive to motivate investigation into the problems that are being pursued? Deciding when to provide an explanation, when to model, when to ask rather pointed questions that can shape the direction of the discourse is delicate and uncertain….Because no rules can specify how to manage and balance among competing concerns, teachers must be able to consider multiple perspectives and arguments and to make specific and justifiable decisions about what to do. (p. 393)

E-learning events, like traditional classroom lessons, have the potential to develop in a variety of ways because of the multitude of social, intellectual, pedagogical, and technological factors that are at play in the virtual classroom. Teachers must attend to many aspects of the learning process.

One important way that teachers can do so is by closely monitoring students' text chat activity. This monitoring process is very difficult, especially when the teacher is lecturing. To facilitate the teacher's ability to focus on the text chat activity, it might be wise to have a careful prepared *written* lecture. A teacher could then devote more attention to the important activity of the text chat. Additionally, a well-written lecture text could alleviate some of the ambiguity that might plague an online lecture.

The practice of preparing a lecture is a technique of teaching that has a firmly established tenure in traditional pedagogy. Thorough preparation of a lecture is cited as an effective way to

organize major points to be taught, to assemble supplementary material such as definitions, formulae, equations, etc., and to circumvent potential problems or omissions in content. While lecturing word for word from a script is undesirable (Davis, 1993), utilizing an outline of key words and phrases during the online lecture could be beneficial. Although it would be time-consuming, preparing a completed written text well in advance of the online lecture would allow the teacher to check that the language used in the lecture has clear referents. Such specificity in language is a hallmark of good writing.

Another important way that a teacher can attend to the learning process that is occurring in the online lecture is to incorporate occasional checks for understanding. These checks for understanding can come in the form of online polls. Horizon Wimba has a tool for conducting such polls. As seen in Fig. 4.23, a screenshot of a small portion of the Horizon Wimba interface, the poll tool only allows for yes and no answers.

Fig. 4.23. Horizon Wimba tool for conducting polls during an online presentation.

As students answer a poll question by clicking on the "yes" or "no" buttons, their responses are indicated by the corresponding "check" mark or "x" mark in the column to the right of their names. A field near the bottom of this area displays the tabulated results. Not only would

student responses to these poll questions alert a teacher to misconceptions, but would serve to keep the students more engaged in the online lecture.

CHAPTER FIVE

The Case of the Online Chat

Throughout the last chapter, I examined the synchronistic responses of students during an online lecture I gave in my Art Appreciation class. In the version of Horizon Wimba used in this study, students utilized a live text chat to ask questions or make comments. There were times in the course, however, when I wanted the students to hold synchronous "break-out" sessions so that they might discuss works of art in a smaller group setting. I gave my students several opportunities to do so during a couple of the online lectures. This chapter will relate the story of one of these sessions during a class period late in the semester.

This story will focus on two pairs of students who had notably different experiences as they worked through the e-learning event. Andy Bates and Sarah Morello, the first pair of students, reminded me of an ancient proverb about flexibility (Laozi, 1994). They were like the pliable stalk that bends when strained as opposed to the rigid branch that snaps under the pressure.

Andy was at the end of his undergraduate degree when he became a part of my class. He was close to finishing the collegiate chapter of his life. During this time, he had studied environmental design; he saw it as a noble field of study. He loved the field's emphasis on directing environmental development toward the creation of community and the restoration of the ecology. Andy sought to create harmony not only in this aspect of his life's work, but also in his relationships with others. His desire for, as he put it, peace with all people was evident throughout the course of the semester.

His partner in the online chat, Sarah Morello, served as a powerful counterpart to Andy's laid back and easygoing personality. Sarah was an extremely resourceful and intelligent young

woman who believed in the importance of being prepared. Not only was she entering her senior year, she was readying herself to enter graduate school as soon as she was finished with her bachelor's degree. She had begun to make these preparations by moving back in with her parents to save a little money and had volunteered to take my class online because she was planning to attend an online graduate school. She thought that her experience in my class would equip her with the tools she needed to succeed in that online learning arena, as well. Her resourcefulness in the online chat would prove to be a valuable asset for her small group's work.

The second pair of students, Chul Lee and Jason Foster, was like the rigid branch of the proverb. Chul was a junior who was majoring in political science in hopes of entering law school after completing his degree. Having lived in a suburban-Atlanta community since the age of four, Chul's personal characteristics, including his Southern drawl, often defied his South Korean appearance. He loved most of the things that prototypical Southern guys like to do in their spare time, including hunting, fishing, and any other similar outdoor activities. It seemed that these kinds of individualistic enterprises translated into Chul's practice in the online chat—his success was, in his eyes, dependent upon himself.

His partner, Jason Foster, seemed to be equally self-reliant in the online chat. Jason was a senior economics major who enjoyed trying new things. His enthusiasm for novel experiences was the reason he had signed up to take this online course. However, throughout the course of the semester, he had encountered frustration from time to time, particularly about the use of the computer technology required. During the time in which he was supposed to hold the online chat with Chul, Jason took several missteps that coupled with Chul's self-sufficiency, caused a significant disconnect in the learning process.

The Assignment

The semester was nearly complete, one week before the last day of class on July 8th. The students had a great deal on their minds during "the final push." Still, I utilized this sixth and final synchronous class meeting to challenge them with an assignment that required them to use many of the skills they had developed throughout the semester. They would need to juggle the immediate concerns of the assignment itself, which required Internet research and analytical thinking involving "the generation of new information not already processed by the individual" (Marzano, 2001, p. 38). In addition to Internet research and analytical thinking, to complete the educational task students needed to navigate through multiple steps. Students would first conduct a small group chat on WebCT, then synthesize their discussion and present the findings of their research and discussion by making a WebCT discussion board posting. Finally, each group would appoint a spokesperson to share their conclusions during a whole group chat at the end of the class period.

Puzzles About Art

There is electricity in the Art Appreciation classroom today. As we settle into our typical positions—me at my lectern and the students in their seats– students buzz with chatty talk about their end-of-the semester coursework and weekend plans. Finally, about four minutes after the scheduled beginning of class, I strap on my headset microphone, begin the Horizon Wimba archive, and type in a quick message to welcome the online students to class.

robbie_quinn good afternoon!

At the same time, I say, "Alright…okay. Can everybody hear me out there?"

sarah_morello i can hear you

jacqueline_navidad hello

tricia_johnson hey there

I see on the Horizon Wimba window that there are other students logged-in to the session, so I confirm their readiness and exclaim, enthusiastically, "Alright! Good deal! Well, let's get started! I want you, today, to engage in what are called *Puzzles About Art*." I continue with an explanation of the book with the same title (Battin, Fisher, Moore, & Silvers, 1989), which is a presentation of real-world and hypothetical scenarios about artworks that requires the reader to consider questions about how we perceive those works according to differing aesthetic stances. I want my students to use these puzzles as a jumping off place for quality small group discussions about various aesthetic issues. I continue explaining how they were to complete the day's assignment.

I explain that each group would need to compile an image of the artwork that is under consideration in the puzzle, and a presentation of the group's answers to the questions contained in each puzzle. I made it clear that each group would need to be prepared to present their findings for their classmates, with the lecture hall students doing so on the classroom's stage under the direction of my teaching assistant, and with the online students working with my facilitation in a WebCT chat room.

As the lecture hall students receive their puzzles about art, I address my online students by speaking directly to them and by using the Horizon Wimba chat to give them particular directions to complete the assignment online. After doing so, I field a couple of questions from some of the lecture hall students. My online group asks several questions of its own. Tricia questions an element of the assignment that I had neglected to address in my opening comments.

> tricia_johnson Do we discuss this in the chat rooms or post the discussion? Once we're done, do we meet back at 3:30?

I reply, “Yeah, let’s meet in the general chat room at 3:30.” Then, again, I have to take a minute to answer a question that one of my lecture hall students asks. In the meantime, Tricia needs some more clarification.

tricia_johnson For now though, we just post our discussion?

Obviously puzzled, Katie submits a similar text message.

katie_murphy do we meet in a chat room?

When I read her comment, I know I need to reiterate the instructions, being more specific this time. After doing so, I assume that the students have adequate instructions to conduct their work and complete the assignment. However, my ambiguous and poorly given directions are problematic, particularly in the online realm. Still, I step away from my computer for a moment to assist a pair of my lecture hall students with their work. After a couple of minutes, I return. I am surprised that many of the online students are still chatting in the Horizon Wimba area. As I scroll back through the dozen or so submitted messages, I am thrilled to see that the students have collectively created the structure that I had failed to provide them.

tricia_johnson Why doesn't group 3 just meet in chat room 3 at 2:45. We'll just take a moment to read the posting first

sarah_morello good idea

katie_murphy sounds good tricia

However, groups four and five appear to be experiencing some difficulty materializing. Chul’s subsequent comments reveal his group’s failure to coalesce, which is the subject of the following vignette.

Vignette #1:The Futility of the Work of Group Four

Video Journal Reflection: June 25, 2004

> *I think that the important thing is that I was able to participate in all of the WebCT chats. The students knew I was there, and they asked me questions. But, they were really very self-motivated.*

Trying to Get It Together

I had unwillingly left several fires burning out of control as I made preparations for the lecture hall students' discussion with my teaching assistant. While it would have been more desirable for me to maintain a tighter grip on this important group formation period, I hoped that some clever student would exercise his or her organizational prowess.

To my dismay, a half a dozen of the students are still trying to figure out where they are supposed to be and what they are supposed to be doing. I really have opened Pandora's box with today's assignment. Rita finally types out a question.

```
rita_mclendon          im in group 4 where are we?
```

I type a response more quickly than my fingers know how to go.

```
robbie_quinn      ita, yu guys should be in chat room 4
```

As soon as I hit the return key to submit the comment, I roll my eyes and let out a big groan. As rapidly as I could I remedied the misspelling, checking my submission this time before hitting the return key. Chul immediately suggests, by typing, that his group can meet in chat room four. I peck out my approval.

I simultaneously log on to the WebCT course site, and click on the lower left hand link that takes a user to the Chat area of the site. I click on each of the five rooms, in which I had instructed my students to work. The tan and khaki colored windows (see Figure 5.1) of each of the five chat rooms clog my computer screen. I find myself wishing for a little more screen real

estate, but I do my best to make each window small enough so that I can see each of the five chat rooms at the same time. (For using multiple chat windows in WebCT, see Appendix D.)

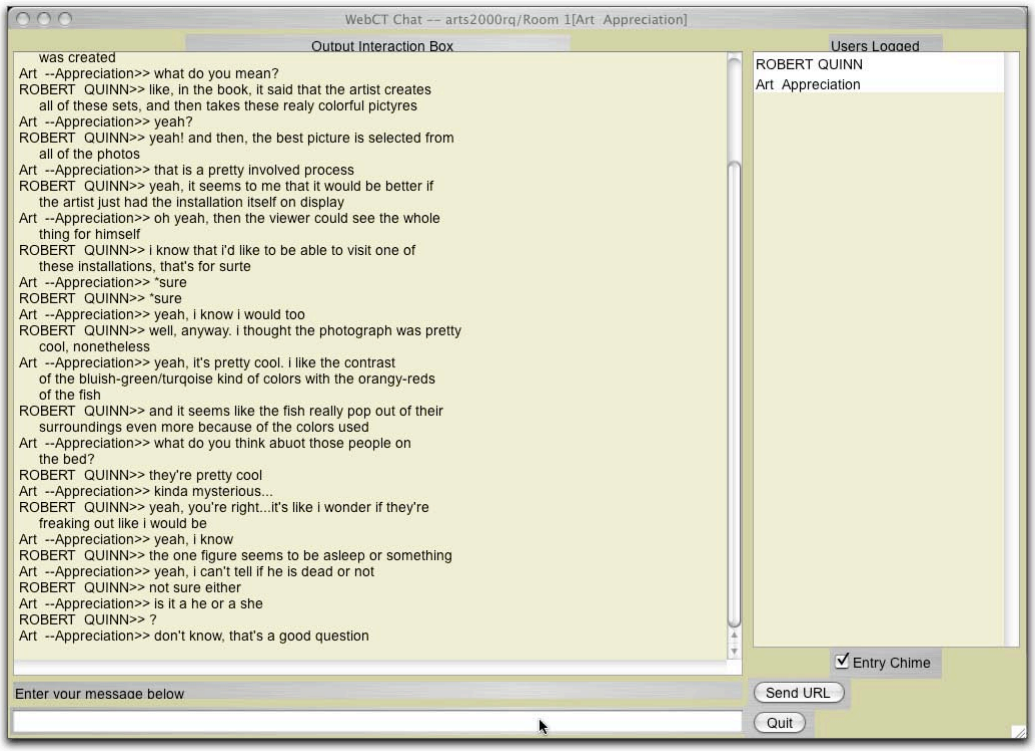

Fig. 5.1. Screenshot of one of the WebCT chat room windows.

Unfortunately, I have no idea how things were going in any of the chat rooms because WebCT does not allow you to view any of the chat that had proceeded before you arrived in the room. Since I am concerned about group four's situation, I click on its window, so that I could type in a message. Before I had a chance to do so, Chul submits a telling comment of his despair over Rita and Jason's absence and his attempts to get them together.

Disconnects and Miscues

Chul flops back in his computer desk chair and drapes his head and neck backwards over the top of the seatback. As he studies the blank white ceiling of his apartment, he resolves to

fulfill the assignment by himself. He tells himself he does not need Jason or Rita; he can do the work alone.

He puzzles at he and Jason's lack of organization. He is not sure about Rita. He tries to remember if they had even crossed paths throughout the entire course of the semester. *Hmmm*…. he thinks, as he glances back at the computer screen, noticing Jason's and Rita's absence on the list of users in his WebCT chat room. *Jason was here a half an hour ago!* He is so confused about Jason's whereabouts. He scrolls back through the transcription of the entire chat to see if he might have missed some message Jason had sent. Perhaps Jason has tried to arrange some alternate plans for their small group to complete its work.

Ah ha! Chul recalls the brief exchange he and Jason had shared at the beginning of the WebCT chat, which he sees before him once again in the chat transcription. He cannot remember if there had been any other dialogue between the two of them, so he quickly scans the rest of the chat transcription until he comes to the end. There were no further signs of Jason.

Chul can only surmise that Jason had encountered some kind of technical difficulty or was doing something else that precluded him from continuing with the class. Chul takes a quick peek at his wristwatch and gasps to see that it was already 3:10. He only has twenty minutes to get something together for the assignment. His head was spinning. With all of the confusion surrounding his group's disintegration, he has to remind himself about the assignment.

He leaves the WebCT chat window open, just in case Jason or Rita decide to finally join him, and opens up the discussion topic with his group's number. He sees that the only discussion message posted was one that had as its subject "your topic." *Voila!* he revels. He reads the posting title aloud: "Don't Forget the Ketchup" (Battin, Fisher, Moore, & Silvers, 1989). Afraid

his roommates might overhear his rambling, he opts to read the rest of the message silently. The puzzle concerned an incident from 1967:

> The Art Gallery of Ontario paid $10,000 for a work called *Giant Hamburger* (1962) by Claes Oldenburg: a hamburger completed with pickles on top, made of painted sailcloth and stuffed with foam rubber, about 52 inches high and 84 inches across. A group of local art students fabricated a cardboard ketchup bottle on the same scale, and contrived to set it up alongside the hamburger, to the delight of the local newspapers and annoyance of the museum management. The hamburger remains in the museum collection, but the bottle has not been seen since.
>
> What are we to make of it? Should it be regarded as a gesture of disrespect to an eminent artist and a dignified institution, as a show of bad manners? Or should we see it as a satirical expose of the facility and superficiality of the "pop" art of the time (as pop art sometimes was a comment on "serious" art of its time)? Was it a harmless joke, leaving things just as they were, with no aesthetic damage being done? Or was something damaged, aesthetically or otherwise, by the prank? Was it simply a blunder? Did the students miss the point of Oldenburg's work and hence make the relation between their cardboard bottle and the Oldenburg mock-up aesthetically uninteresting? More to the point, should we say that the students had created a new artwork of their own, incorporating Oldenburg's work as part? (Battin, et. al., 1989, p. 2-3)

He cannot wait to see what this artwork looked like. His fingers work deftly as he pecks out the title of the artwork into the Internet search engine he has just opened. Several hundred results returned; thankfully, the first one was a link to the artwork (see Fig. 5.2). He follows it, and is

Fig. 5.2. Claes Oldenburg. *Floor Burger.* 1962. Painted sailcloth and foam rubber.

surprised to see how interesting the sculpture is. Chul would be the first to tell you that he never considered himself the most artistic person in the crowd, but he was impressed with the growth he had seen in his own perception toward works of art like this one.

He remembers that I had told the class to collect a picture of the artwork to share with the rest of the class. Therefore, he quickly saves the image file onto his computer. He also needs to answer the questions the puzzle had posed, so he navigates to the discussion message window once again. He realizes that he needs some help with these questions. It was going to take a while to answer all of them. However, he knew commiserating with himself was not going to get the job done any faster so he cranks up his word processing program and starts typing away.

After he had been working for ten minutes or so, he feels like checking the WebCT chat just to see if somebody had decided to join him. He only sees his name and mine as those logged in to the chat room, so he checks the chat transcription to see if he had missed any messages. There was a new message from me containing instructions for concluding the activity. Chul is pleased that he is well on his way to completing it. He continues answering the questions without doing much research online, but just occasionally looking at the hamburger sculpture to think through some of the questions.

He checks his watch again, and he sees that it is 3:30. It is time to meet with the whole group and discuss the puzzles. His hands go into hyperdrive as he saves the word processing document, accesses the discussion topic I had mentioned, and uploads his image file and typed response. He also copies and pastes his answer into the discussion message. He scans the verbiage to make sure it is accurate, and quickly clicks on the "Post" button to submit his response (see Fig. 5.3).

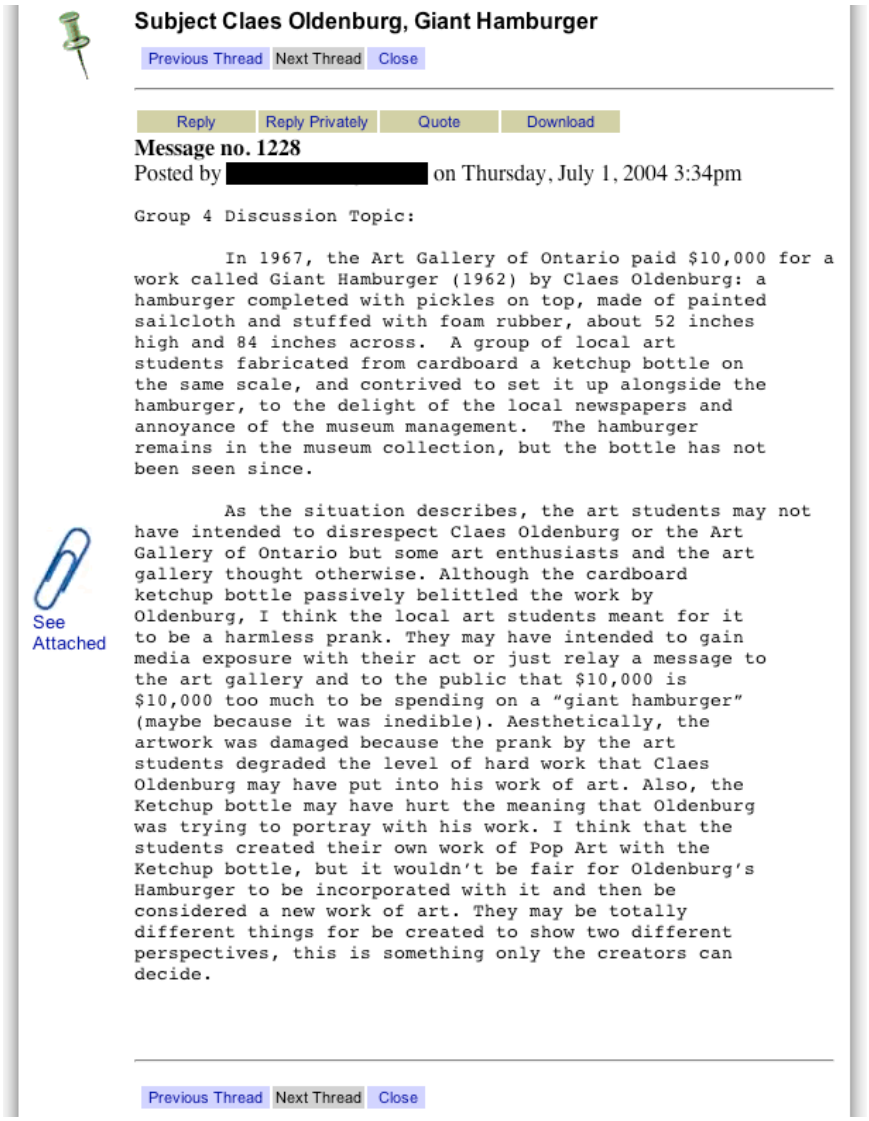

Fig. 5.3. Screenshot of Chul's submitted discussion response.

Immediately, he logs into the general chat room. He convinces himself that he needs to prove to his peers and to me that he had done *all* of the work, and that he was ready to give account for his activities. It is time, he feels, to receive the recognition he deserves for taking the lead when the others had faltered.

An Interpretation of Group Four's Plight

Chul, Jason, and Rita passed one another like ships in the night. In silence, they glided by unannounced and unaware of their proximity. They might as well have been miles apart in the vast ocean of the online chat. They occasionally picked up traces of one another's presence; still, they failed to cohere. There is no evidence of Jason or Rita's activity during the online chat. Perhaps they, too, were working diligently like Chul to fulfill the assignment individually. We have only the bits and pieces of Chul's lonely voyage through the e-learning event. Therefore, in this section, I will focus only on his work in the online chat. I will explain the factors contributing to his experience as a lone wolf in a designed group activity. Looking at each of the three realms of e-learning (Axis A as information processing functions, Axis B as practitioner interaction, and Axis C as electronic pedagogy), a better picture of what was happening in the e-learning event emerges.

Chul's Location on Axis A, Information Processing Functions: Knowledge Utilization

Chul's work in the online chat is primarily a result of panic. After spending a large amount of time and energy trying to round up his group members, he came to the realization that he needed to accomplish an educational activity alone in very little time. Without the aid of any of his peers, Chul faced a workload that seemed too difficult for an individual to tackle. He faced a major obstacle in his path to arriving at his goal for the e-learning event: to complete the assignment.

He knew there was a specific problem to solve, and he was determined to overcome the obstacle that had presented itself, although he was aware that there were other alternative solutions to his dilemma. Briefly, Chul considered a couple of potential solutions to the problem. He could have found an Internet resource from which he could plagiarize. He considered

pleading for reassignment into a functioning group. He even thought about giving up. After identifying these alternatives, Chul evaluated each of them. The alternative he selected was the only option that he could have lived with, particularly since he was used to relying on himself to achieve success. Therefore, he took an extremely direct path by immediately typing a response to the many questions about the *puzzle about art.* He submitted his response and prepared himself to defend his answers.

I see, in many of Chul's decision-making processes, evidence that he has utilized his knowledge of the various potential solutions to his problem in order to accomplish a specific goal. The way he processed information in the less than desirable situation he had found himself most closely relates to *knowledge utilization*. More specifically, the particular procedure by which Chul processed information in his work was through the *problem solving* process. During

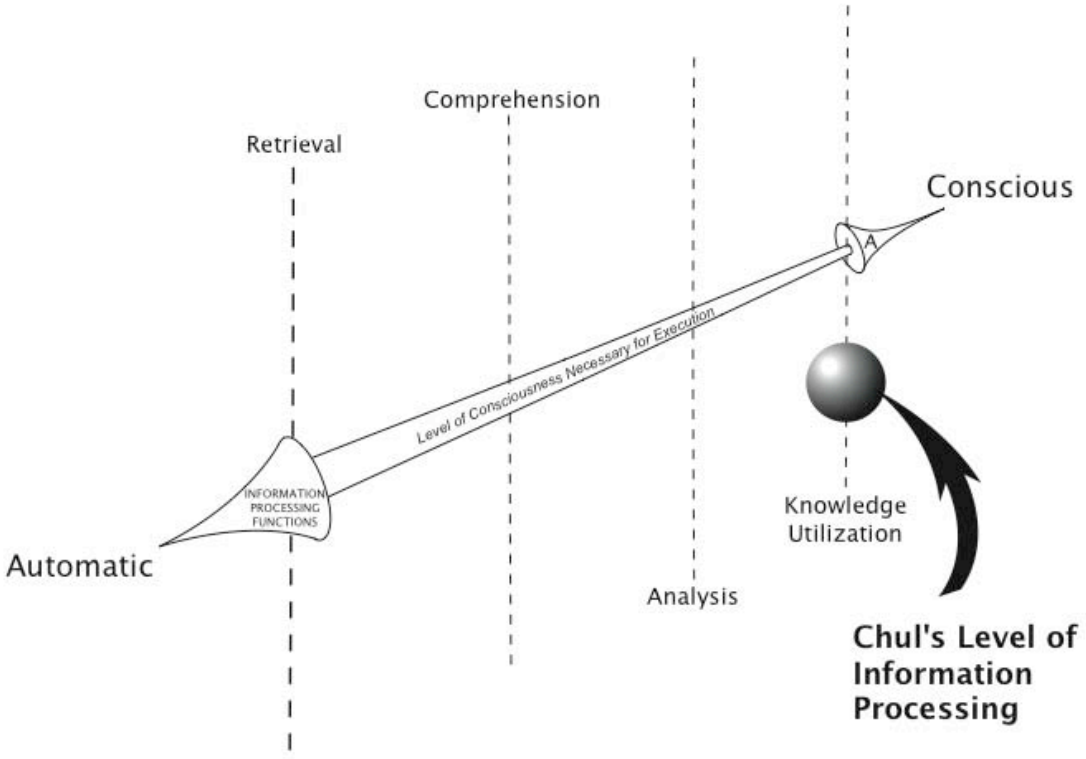

Fig. 5.4. Chul's level of information processing during the online chat.

the online chat, Chul attended to many of Marzano's (2001) five steps associated with problem solving: identification of obstacle to goal, possible re-analysis of goal, identification of alternatives, evaluation of alternatives, and selection and execution of alternatives. Chul attended to many of these steps in his own work during the online chat. It is for this reason that I have characterized his level of information processing to be at the *knowledge utilization* level of Axis A, as shown in Figure 5.4.

Chul's Location on Axis B, Practitioner Interaction: Cognitive Constructivism

Chul felt desperately alone throughout the online chat. His frustration mounted as his fellow group members failed to appear in the virtual space. Chul's disposition as an independent and self-sufficient person turned his frustration to resolve. Instead of giving up on the assignment, Chul forged ahead in isolation. The occasional dialogue he had with me was the only contact he had with others in the community of inquiry. Through our brief, and fractured, discourse Chul was convinced that he could accomplish the e-learning activity alone. I presented him with an opportunity to learn, and he took it upon himself to see to it that he fulfilled that task.

Additionally, it appears that Chul successfully thought through the puzzle presented about Oldenberg's art. His posted discussion message provides evidence that he was grappling with issues relevant to the puzzle. He attended to the many questions posed, and developed his own conclusive statement about the issues that had been raised. In one statement, particularly, regarding the students' creation of the ketchup bottle, it appears that Chul was making sense of a unique aspect of this puzzle. He formulated a personally meaningful response addressing the possibility that the work was a satirical expose. The practical way in which Chul viewed the

worth of Oldenberg's work of art was related to the art object's worth in terms of its edibility. It is through this frame of reference that Chul experienced some cognitive appreciation of this

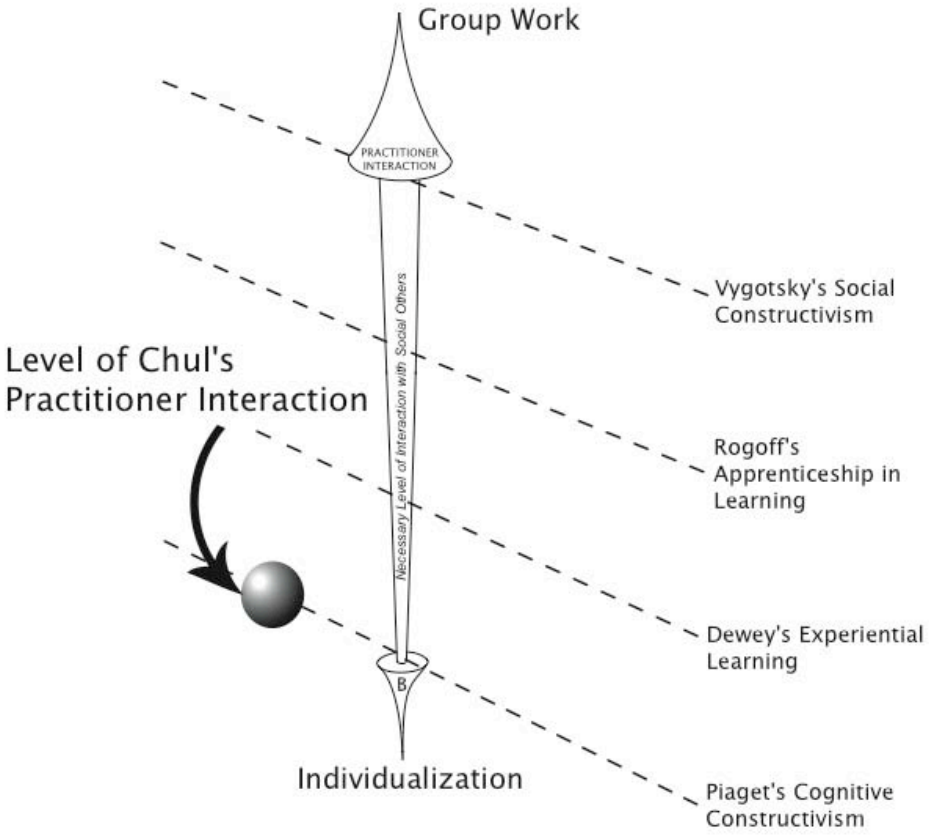

Fig. 5.5. Chul's level of practitioner interaction during the online chat.

individual work. Because of his individualistic effort, and the evidence it provides about his thought processes, I consider Chul's level of practitioner interaction as *Piaget's cognitive constructivism* (see Fig. 5.5).

Chul's Location on Axis C, Electronic Pedagogy: Teaching as Diagnosis

As I consider my teaching techniques in the online chat, and their effects on Chul's experience, it appears that I was acting in a highly student-centered way. I was not presenting instruction, nor was I leading Chul through a series of questions. Instead, I was watchful over his

group's attempted formation without taking matters into my own hands. I waited in hopes that Jason and Rita would eventually join Chul in the WebCT chat. However, I did not try to directly contact Jason or Rita myself. Having worked with Chul for the semester, I was confident that he could successfully answer the questions contained in his art puzzle. To complete the assignment alone would be a lot of work. Furthermore, he would not be able to benefit from the insights that other group members might make.

I was confident in Chul's abilities because of the skills he had demonstrated over the course of the semester. First, he had experience using the Internet as a tool for his coursework. He had already successfully found images of artworks on the Internet and had shared them with the class via the WebCT Discussion Board. Second, he had also used a word processing program several times during the semester to prepare typed statements, including a midterm paper. Technically, Chul had all of the preparation he needed to complete the activity. Third, the course curriculum provided Chul the tools necessary to think about works of art from a variety of perspectives—through our previous class discussions, particularly those held through the WebCT Discussion Board, I could see that he was prepared to examine the multiple facets of art as this *puzzle about art* required him to do. Chul had been an active participant in these asynchronous discussions throughout the semester. Therefore, I believed he had the skills and tools to complete this task on his own—even if this was not my intended purpose. However, as his group floundered, I remained present so that Chul could contact me if he needed to. Nevertheless, I allowed him to have the ultimate responsibility for his group's work.

I classify my teaching strategy as *teaching as diagnosis* for three reasons. First, I was convinced that Chul could complete the assigned activities because of my assessment of his level of preparedness. Second, I had created an opportunity for him to conduct this work by initiating

the online chat, and providing him instructions. Third, I had enabled him to complete his work by creating the environment through which he would complete the assignment. As seen in

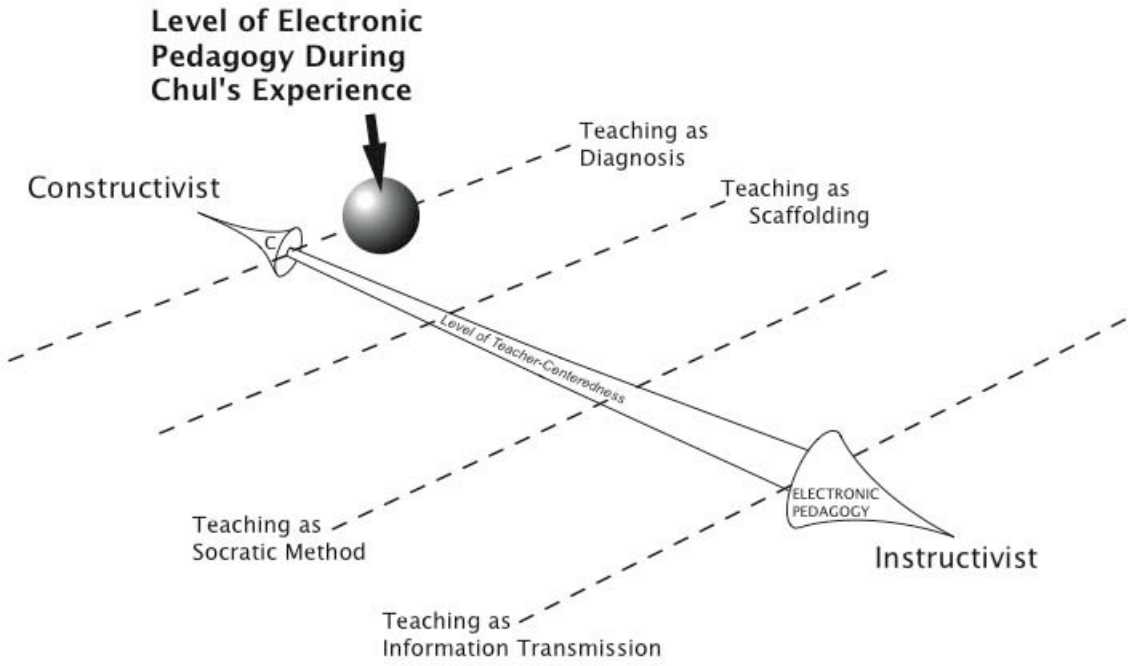

Fig. 5.6. Level of electronic pedagogy during Chul's experience in the online chat.

Figure 5.6, the point that most closely resembles the type of electronic pedagogy I used during the online chat is *teaching as diagnosis*, which is located at the pole of the *constructivist* end of Axis C.

To visualize what Chul's experience during the online chat looks like, it is helpful to plot a point representing his location in the community of inquiry, as described by the Map of E-Learning. In Figure, 5.7, I display only one of the quadrants of the Map of E-Learning.

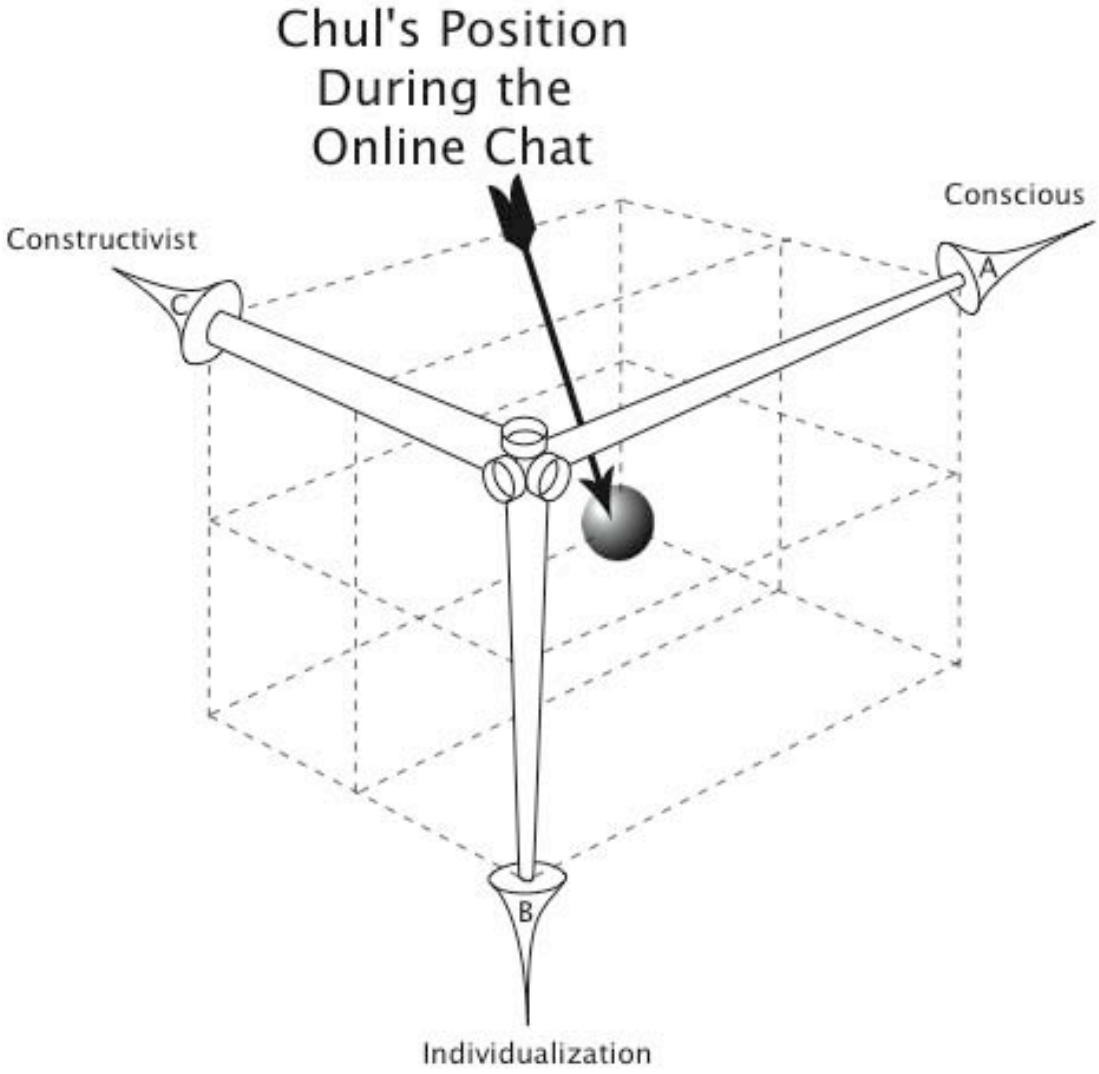

Fig. 5.7. The plotted point representing Chul's position on the Map of E-Learning.

The point representing Chul's position during the e-learning event is the shaded region in the lowermost corner of this quadrant. Because of his solitary work in problem solving and my distanced teaching strategy, Chul's activity was at a fringe position within the community of inquiry.

Assessing the Results of Group Four's Online Chat

The drama of group four's online chat is an enigma. The activity I asked them to perform paralyzed them. Of the five small groups who were working during this class period, this group is the only one that short-circuited. Even group five, after having changed the entire venue of its chat because of some technical difficulty in the General Chat room of WebCT, was able to engage in a successful conversation. Group four's technical dilemma was not of this magnitude. The resiliency with which group five conducted their online work seemed to be a foreign concept for Chul, Jason, and Rita.

In making an assessment of group four's online chat, it is easy to say that the chat was a failure. It is clear that Chul was sincere and tenacious in his efforts to convene the group. The resolve he displayed in fulfilling the assignment in isolation is commendable. Jason's misdirection seems to be further evidence of the failure of the online chat. Because of his later attempts to become a part of the work of his group, I am convinced that he had only been absent because of some misunderstanding. Rita's absence can only be a result of her own willful departure, since I told her directly where she was supposed to be during the online chat. She did not make any subsequent attempts to rejoin the rest of us online for the duration of the class period.

Group four's chat was not only a logistical failure; it was unsuccessful because its members were robbed of the opportunity to socially construct knowledge and make meaning through discussion. The work that Chul did, while valuable, was not as rich and thoughtful as it could have been with supplementary insights provided by his peers. Chul's response to his group's *puzzle about art* is a straightforward reflection of one individual's perspective on the

issues at hand. The depth and breadth of a collaborative response might have provided a more thought-provoking discussion message for the rest of the class to consider.

Implications for Teaching

The biggest lesson I learned from group four's experience in the online chat is that collaboration is not an activity, but it is a way of working. As a way of working, collaboration becomes the method for completing the activities. Essentially, collaborative activity is the result of a collaborative mindset. A collaborative mindset is one that has to be developed. It runs counter to the individualistic manner in which many people live their lives.

One important aspect of fostering collaboration is promoting positive group interdependence. Positive group interdependence exists "when one perceives that one is linked with others in a way so that one cannot succeed unless they do (and vice versa) and/or that one must coordinate one's efforts with the efforts of others to complete a task" (Johnson & Johnson, as cited in Palloff & Pratt, 2005, p.4). Creating positive group interdependence in a class is hard, but important work. Students must have a sense that the group's success is their own individual success. Jason, Rita, Chul, and I would have refused to move forward in our work because of our overarching concern for the well being of the others.

Because positive group interdependence and collaboration is constructed, we cannot expect it to happen overnight. I should have done much more to promote this kind of collaborative mindset, in order to avoid the catastrophe of group four. One such method of enhancing collaboration in the online classroom is the formation of team charters. Palloff and Pratt (2005) describe a team charter as "an agreement or contract among members, outlining how they will interact together, determining the roles each member will play in the collaborative activity, and creating benchmarks and deadlines for the completion and submission of

collaborative work" (p. 27). If I had allowed small groups of students to draw up such charters early in the semester, perhaps there would have been a greater sense of cohesion and interdependence than seen in group four.

Foundational to the creation of a collaborative mindset in the virtual classroom is the establishment of an online learning community. Palloff and Pratt (2005) describe this community as consisting of the following seven elements: people, shared purpose, guidelines, technology, collaborative learning, reflective practice, and social presence. Many of these elements were a part of my class; however, I neglected others. As a result, there was a lack of a collaborative mindset from time to time. For example, when I vaguely instructed the students to chat about their art puzzles, I neglected telling them about the finer points of the task. Confusion ensued. At the late point in the semester during which this e-learning event happened, the students had already conducted similar chats. Each of them was done in the same way: students break out into small group chats, compile the results of their discussion, and share with their classmates in a whole group chat. It is remarkable that the students were reluctant to rely on a collaborative mindset to conduct their activities on their own in lieu of my poor initial instructions. It is now clear to me that I did not provide *guidelines* for the online learning community, particularly the necessary guidelines for successful small group chats. These guidelines could have provided the ground rules for interaction and participation, including the method we would adhere to when having online chats.

Vignette #2: Creativity Out of Chaos in Group One

Coordinated Participation

In the previous story about the online chat, we saw that Chul, alone, formed the core of the online chat activity for group four. If Chul had not persevered through his group's breakdown, group four would have imploded in cyberspace, leaving nothing but a matter-hungry black hole. Eluding a similar fate became the plight of the other small discussion groups that were working simultaneously that afternoon in my art appreciation class.

The operations of another group – really a pair – of students who *were* able to cohere in fulfillment of the day's assignment were quite different. This group, comprised of Andy Metzker and Sarah Morello, formed under chaotic circumstances. Yet, its members remained flexible enough to utilize the tools at their disposal and make a successful attempt to solve their puzzle about art.

Video Journal Entry, June 25th, 2004

> *One of the neat things that happened in the WebCT chat rooms is that students were researching the artworks under discussion online in a very freeform kind of way. They were going to different websites, looking up information about these artworks, coming back and sharing it, even sometime pasting the website's address into the chat room discussion so that the other group members could go and look at that website if they wanted to. And, so, that was a nice kind of participation on all levels.*

Convening Group One

After I gave the online group its assignment, the individual group members try to make the accommodations necessary to conduct their online chat activities. Several students ask key questions while others provide crucial suggestions.

```
andy_metzker      where is group 1 going to meet?
```

I am pleased to see that Katie offers a reasonable solution to his question.

```
katie_murphy      why don't we meet in the chatroom of our group number
```

sarah_morello good idea

Immediately, Sarah opens up the WebCT homepage in a new window with her Internet browser and logs into our course website. There are several things she knows she needs to do within the next thirty seconds. She races to open up the discussion topic labeled July 1st class, and surmises that she is in group one, since she recalls that I had said she would only be able to see her group's topic. She opens up the solitary message contained in the topic. It is from me. Her eyes race through the information contained in the posting.

Oh, cool! she thinks. *This should be really good.* The puzzle is all about one of Vincent van Gogh's paintings. She had always liked van Gogh's art. She fondly remembers her trip to the High Museum in Atlanta a couple of years ago when she had seen his *Starry Night* painting. The puzzle is called "Van Gogh's Ugliest Painting" (Battin, Fisher, Moore, & Silvers, 1989). She read:

> Describing his own painting *The Night Café*, Van Gogh said: "The picture is one of the ugliest I have done…I have tried to express the terrible passions of humanity by means of red and green. The room is blood-red and dark yellow with a green billiard table in the middle there are four citron-yellow lamps with a glow of orange and green. Everywhere there is a clash and contrast of the most disparate reds and greens…."
>
> Because Van Gogh himself insisted that the picture is ugly, must we agree with him? Because he asserted that it was "one of the ugliest I have done," must we also regard it as less valuable than his other, more beautiful pictures? Or if as he stated, he was trying to "express the power of darkness," does its ugliness make the painting a better one? (Battin, et. al., 1989, p. 50)

Sarah cannot wait to see a picture of this work. She thinks, *How can one of van Gogh's works be ugly?* Just then, she remembers that she had wanted to meet up with her group members, whoever they are. She quickly opens up chat room one, and is pleased to see that Andy is already there. He immediately sends her a message.

Andy Metzker>>are we the only 2 in the group?

Sarah Morello>>i'm not sure

She is still frantically working on locating an image of van Gogh's painting in the other browser window. She pulls the chat room window up once again and writes another quick message, hoping to spark some conversation with Andy, who still has not written her back.

```
Sarah  Morello>>this is sort of chaotic
```

She did not want to come off sounding too negative, so she immediately asks:

```
Sarah  Morello>>have you read the topic yet?
```

Andy, generalizing the sentiments of her first comment to his entire experience in my class, agrees.

```
Andy  Metzker>>the whole semester seems a little chaotic
```

Sarah is glad to know that she and Andy are in accord. His successive comment confirms their connection, but gets the ball rolling in a more positive direction as he asks about their group's work.

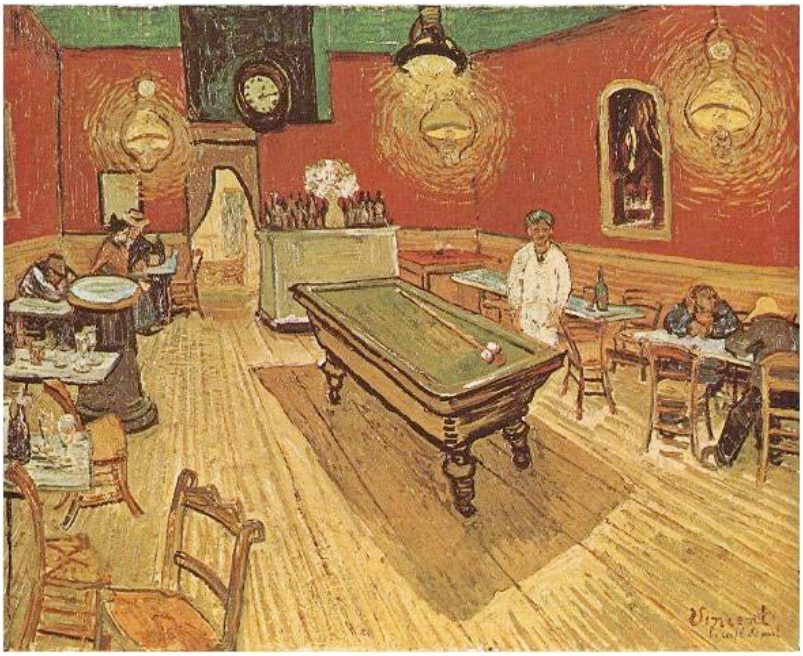

Fig. 5.8. Vincent van Gogh. *The Night Café*. 1888. Oil on canvas.

Sarah instantly returns to the list of results her Internet search engine had retrieved for her query about van Gogh's *Night Café*. She follows one of them to access the work of art (see Fig. 5.8). *Gosh,* she thinks, *maybe van Gogh was right about this painting being one of the ugliest he had done.* For her, van Gogh was the painter of sunflowers, irises, and pretty landscapes. She reads more about the painting and van Gogh's thoughts about it, then her own thoughts returns to Andy. She instantly opens up the chat room window.

> Sarah Morello>>here's an interesting article...it's along the same lines as what robbie gave us:
>
> http://www.famousartreproductions.com/nightcafecont.html

She assumes Andy is studying some similar site, so she is not dismayed when he does not reply for a little over a minute. Instead, she tries to provide some forward momentum for their group work.

Moving Forward

Andy, too, begins searching for additional information by opening a new browser window and typing into his Internet search engine. Links to several hundred possible webpages are instantly available to him. He follows the very first one and begins scanning the material presented.

Just about the time he had started reading some interesting tidbits, he hears a chime coming from his computer, which signals someone's entrance into the chat room. He sees that I have entered the chat room. Sarah wastes no time in starting a quality conversation.

> Sarah Morello>>ok, well, i think that the painting has a pretty creepy look

Andy's deceptively youthful face contorts just a touch when he reads what she wrote.

> Andy Metzker>>really, i dont think it looks that bad.

Andy Metzker>>i wouldnt say ugly

Sarah Morello>>he did a good job of conveying the darkness of the cafe

Andy Metzker>>I agree.

Sarah immediately sends a long comment.

Sarah Morello>>he said, "I have tried to express the idea that the cafe is a place where one can ruin one's self, run mad or commit a crime. So I have tried to express as it were the powers of darkness in a low drink shop...and all this in an atmosphere like a devil's furnace, of pale sulphur, all under an appearance of Japanese gaiety and the good nature of Tartarin".

Since Andy asks where she had gotten the quote, Sarah copies and pastes the URL of the website she had been viewing during their chat and sends it to him. Andy notices that it is the same site that she had directed him to earlier in the chat. He has not had time to look at the site yet, but thinks he ought to this time since it seems to have some good information.

Andy Metzker>>well to answer the first question, i dont think we have to agree with van Gogh that the image is ugly

Sarah Morello>>i agree

Sarah Morello>>even though this painting is considered by him to be "ugly," i think it is a good representation of the darkness he was trying to show

Andy Metzker>>As we know, certain things appear beautiful to some and ugly to others.

Sarah Morello>>in my mind, i think it's a great representation and therefore a great piece of art

Andy bounces back to one of the webpages he had left open, and continues reading. He follows one of the links provided there to another webpage, and continues to delve more deeply into the painting. A few minutes flew by as he works, following link after link. Not wanting Sarah to think he is being idle, he quickly returns to the chat room and shares some of his newly acquired knowledge with her. She counters with a comment regarding the color choices van Gogh made in the painting.

> Sarah Morello>>i think that the colors add to the creepy tone
>
> Andy Metzker>>the yellow for the lights works well at capturing the dim cafe light
>
> Sarah Morello>>yeah

Andy restates his initial assessment, which differs from Sarah's appraisal.

> Andy Metzker>>i dont know about creepy, to me, maybe a little hazy
>
> Sarah Morello>>the reds and greens don't really seem to blend very well, which adds to the uneasiness of the painting

She glances again at the image of the painting that she had up in another window. It seems that Andy's argument was winning her over. She clicks back over into the chat room and confesses her agreement.

After his last comment, Andy finds a website called The Artchive[3] that has a good image viewer application. Using the website's zoom tool, he investigates the smaller details of the painting. Just then, he peers at the clock on the wall and notices the time. It is drawing precariously close to the 3:30 deadline. He tries to wrap it up

> Andy Metzker>>so, do we agree that the work although considered ugly by van Gogh and a little depressing should still be regard as a good

[3] The Artchive is located on the World Wide Web at http://www.artchive.com.

work of art

Sarah Morello>>yeah

Sarah Morello>>van gogh did a great job of conveying the message he was going for

Sarah Morello>>that is what makes it good art to me

Sarah tells Andy that she will type their response for the whole group discussion. She cranks up her computer's word processing program in a flash, and begins typing her recollections of their conversation. She checks the transcript of their chat to make sure she is accurately representing their discussion in her writing. She sees that Andy had sent her a message about some of the other coursework. Sarah responds shortly, and goes right back to her word processing document. She visits the chat room occasionally as she works, trying to keep up with Andy's banter.

Sarah Morello>>here's what i've written so far...

Andy Metzker>>ok

Sarah Morello>>We studied The Night Cafe by Van Gogh. We believe that this painting is good art, even though Van Gogh called this work "one of the ugliest I have done." He said that he tried to express the darkness of the cafe. To our group, we think that Van Gogh definitely conveyed a sense of darkness, haziness and uneasiness. Since Van Gogh successfully conveyed the message he was going for, we believe that it is good art. We believe that the not-so-beautiful clash of contrasting colors adds to the tone of the work and helps express the power of darkness.

She suggests that they could share the webpage in which she had found the quote she had shared with Andy previously. Without giving him a chance to respond, Sarah copies and pastes the

second bit of information she had typed up in her word processing document. She sends the message, including van Gogh's quote about the painting and her summation:

> Sarah Morello>>We believe that the not-so-beautiful clash of contrasting colors adds to the tone of the work and helps express the power of darkness

Andy expresses his approval; then, they both exit from the online space in hopes of meeting up with the rest of us over in the general chat room.

Interpreting the Events of Group One's Online Chat

Andy and Sarah began their work in chaos. The tentative spirit that characterized their beginning dialogue dominated the online chat. It is clear that I had not given them the clear direction they needed to get their bearing in the WebCT chat room. Upon reflection, the vast difference in my directions to the lecture hall students and online students is striking. When I gave the lecture hall students their directions, I told them that I specifically wanted them to *answer the questions* contained in their art puzzles. However, I only told my online students to *discuss* their group's given art puzzle.

I also directed my lecture hall students to do three things during the class: retrieve a picture of the artwork under consideration in the puzzle, compile a written response to the questions, and share their discussions with the class. My specific instructions to the online students did not include this list. While the online class was theoretically able to hear my instructions to the lecture hall students, I realize now that many of my online students were having trouble with the audio feed from the Horizon Wimba lecture that day. Ironically, when I initially addressed the online students, I *said*, "Those of you who don't have sound, don't worry about it." I proceeded to verbally direct the online students in what they were to do, again leaving behind the students who had no audio. I did try to type out a couple of lines of direction

in the Horizon Wimba text chat, but these were far too brief and imprecise to offer much assistance.

In the online classroom, directions must be as precise as they would be in the traditional face-to-face classroom; however, there should be extra modifications made for those students who, because of a malfunction in the computer technology run into difficulties. Modifications are necessary at all times in e-learning.

How is it possible, then, that Andy and Sarah were able to pull themselves together? Why did group one cohere, while their counterparts in group four dissolved? Even though Andy and Sarah seemed to be hesitant about the assignment throughout the online chat, they persisted in their work until they fulfilled their task. What kinds of issues were they contending with throughout the course of this e-learning event?

Group One on Axis A, Information Processing Functions: Moving Along the Axis

Andy and Sarah were utilizing a variety of information processing functions. Their work was predominantly at level four: *knowledge utilization*, which is located on the conscious end of the realm of Axis A. Presented with a specific problem, they collected and assembled pieces of information to formulate a response. The knowledge that Andy and Sarah built throughout the online chat was the result of purposefully collected information as they worked toward the solution to a specific problem.

In building the solution to their *puzzle about art,* Sarah and Andy engaged in other types of information processing. These additional functions of information processing are, specifically, retrieval and analysis (see Fig. 5.9 for all three information processing functions used). Retrieval, at level one of Axis A, is a highly automatic information processing function.

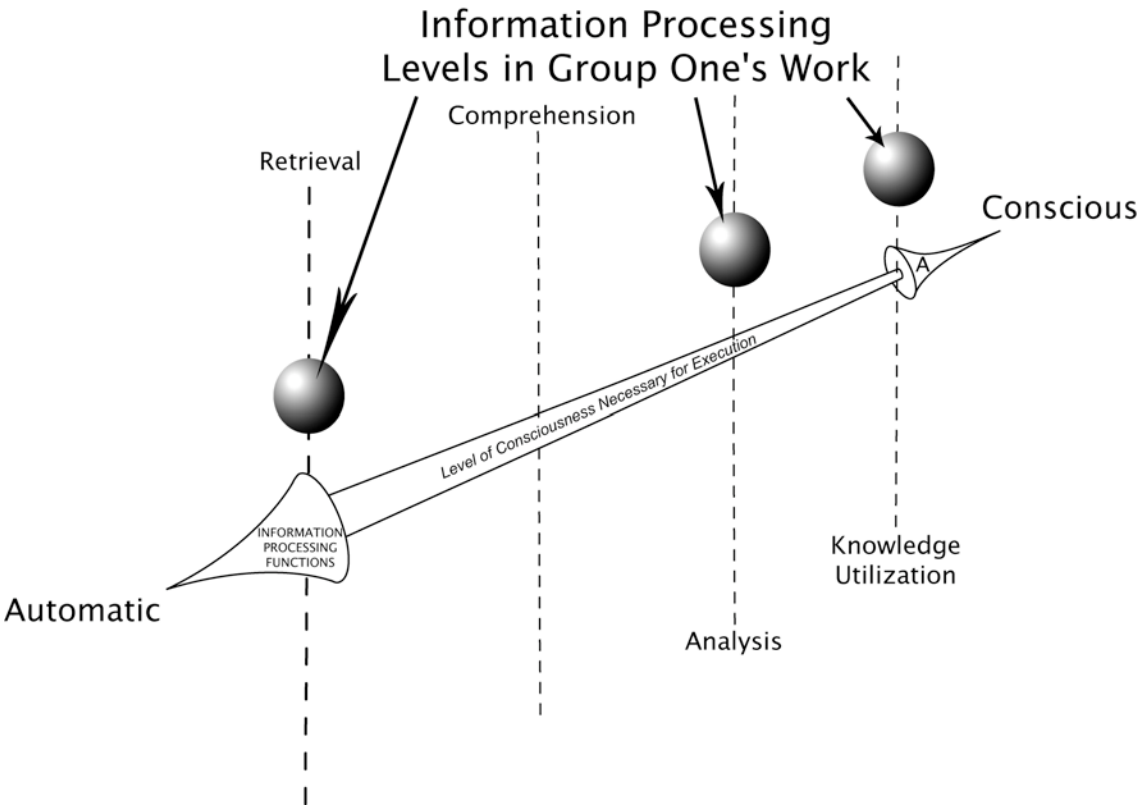

Fig. 5.9. Information processing functions used by group one.

For example, Andy engaged in retrieval through the recall of the simple bit of information he had gleaned about pool players' love for van Gogh's *The Night Café*. Sarah, similarly, retrieved a helpful quote from van Gogh about the painting. Both students were able to isolate and bring several carefully chosen pieces of information to their conversation, even though the plethora of sources they found on the World Wide Web inundated them.

As Sarah and Andy tried to decide if they felt the artwork was ugly or not, they were involved in a process of analysis. They applied general ideas and principles to specific instances, or cases. This is, according to Marzano (2001), *specifying*. The general idea that emerged from Andy and Sarah's conversation is that art can be good even when some consider it "ugly". Andy initially offered this proposition when he reminded Sarah about the class discussion regarding

different people holding different ideals of what makes a work of art good. Then, Andy and Sarah specified particular reasons that the greater principle holds true for van Gogh's painting. Sarah described her belief that since van Gogh's image accurately represented the things he was trying to portray about the place pictured in the painting, it was a successful work of art. Throughout their conversation, Sarah and Andy identified several aspects of the painting, such as the colors used, which supported their conclusions.

Therefore, in terms of information processing functions alone, I describe the e-learning event as one that prompted the two students to utilize knowledge they had retrieved and analyzed through a lively online discourse. Thus, the realm of Axis A affected by the work of Andy and Sarah in their online chat is diverse. The students thinking activity moved through three of the four stations of information processing functions. However, one can see that the students first engaged in retrieval, then moved to knowledge utilization, and then returned to retrieval to test the knowledge propositions they generated.

Group One on Axis B, Practitioner Interaction: Apprenticeship

The necessary level of interaction students must have with a social other during an e-learning event demarcates Axis B. This axis is concerned primarily with the nature of a student's thinking and its contingency upon interaction with other online practitioners (i.e., the teacher and other students). Throughout much of the online chat, Andy and Sarah's conversation is a kind of negotiation of meaning. Andy and Sarah negotiated a mutual understanding of how they viewed the painting. They were comfortable sharing their opinions, initially, and they were uninhibited in expressing their disagreement with one another's assessment of certain aspects of the painting as they moved through the conversation to an eventual compromise.

The assignment forced these two students into a partnership. In designing this e-learning event, I initially arranged their partnership; however, they made a mutual, *albeit* unspoken, agreement with one another to successfully complete the assignment. They struck this tacit contract under an umbrella of a developing *social* relationship (facilitated by their independent decisions to elect to take the art appreciation course and then to elect to participate in the online learning community). It is important to note that they arrived at a commonality of an interpersonal nature *before* they set about to the academic task by first sharing their expressed dissatisfaction with the chaos of the assignment, and the semester, respectively. By sharing their misery about the course, these students realized that they were alike in their struggles with the course (Payne, 1999).

A primary educational objective for the art appreciation course is for students to make informed decisions about art by supporting those decisions with valid reasons. In-class discussion with others is one important way that they express their decisions and the reasons for those decisions. Throughout much of Andy and Sarah's discussion, we see good examples of the ways that they met this educational objective. As the pair actively participated in such rich discussion, they were engaging in an activity that is valuable, particularly in the culture of higher education.

Not only was group one working through a culturally valued activity within the context of a social relationship, the group was intent upon developing consensus as they engaged in collaborative meaning making throughout their conversation. As meaning making processes are the means by which an individual attributes personal perspectives to objects, behaviors, and relationships, collaborative meaning making necessitates the negotiation of meaning between two or more people. Sarah and Andy provided guidance and assistance for one another as each of

them worked through the e-learning event. Each of them effectively worked at times as a leader or more knowledgeable peer. At other times, each of them would take on an apprentice's role as the less knowledgeable partner in the group.

It is for these three major reasons that I consider group one's level of practitioner interaction as being most accurately described by the level demarcated by *Rogoff's apprenticeship in thinking* (see Fig. 5.10).

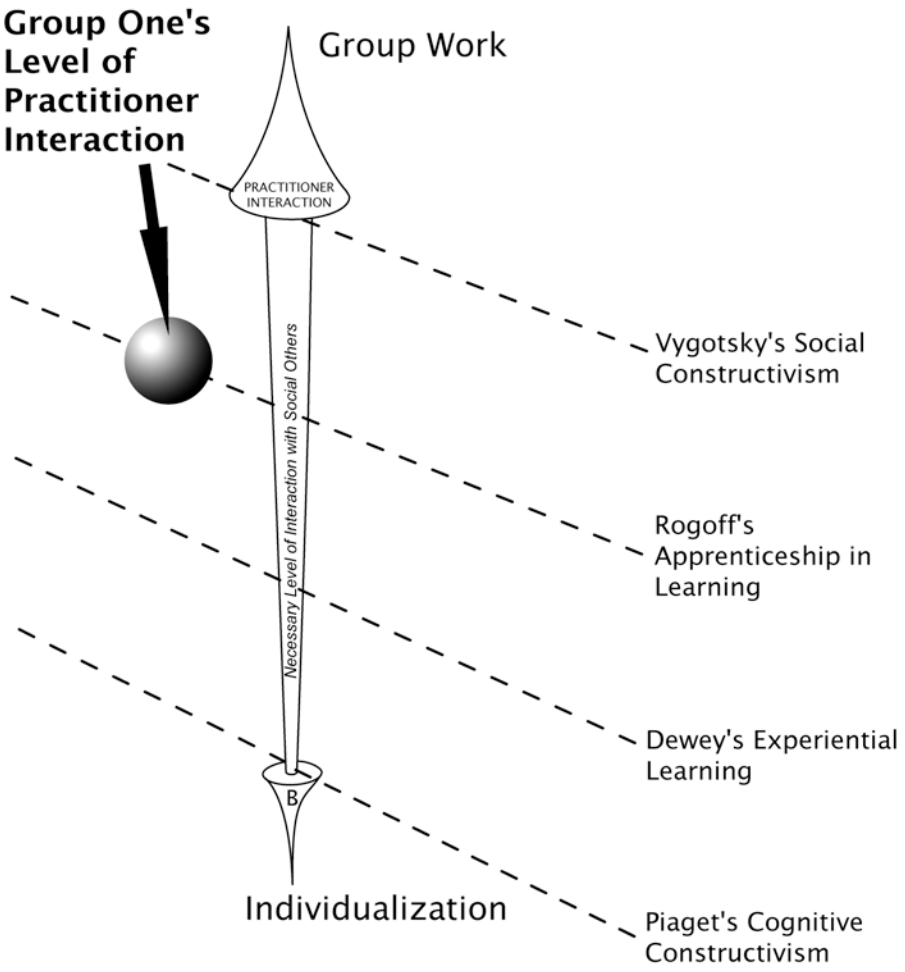

Fig. 5.10. Level of practitioner interaction during group one's online chat.

At this third level of Axis B, students' thinking processes are highly influenced by their social environment. However, each individual in group one was acting upon his or her own direction throughout the social navigation of the online chat. This coordinated effort between an individual and his or her social counterparts is referred to as *guided participation* (Rogoff, 1990). In later work, Rogoff (2003) and her colleagues have expounded upon the individual's role in guided participation by recognizing a subcategory of guided participation called *intent participation*, defined as "keenly observing and listening in anticipation of or in the process of engaging in an endeavor" (p. 178). Intent participation more accurately describes how Sarah and Andy worked through the e-learning event.

As Sarah ventured out into the World Wide Web through her Internet browser, she discovered information about van Gogh's artwork that she found interesting. As she individually made meaning of the concept under discussion, she brought her insights and opinions to the online chat to share with Andy. Likewise, Andy responded individually to knowledge he gleaned from his research, then, he reported his results in the online chat. As the two discussed their initial insights and developing ideas, they participated in a conversation that helped to mold their future conclusions.

For example as Andy took issue with Sarah's assessment of the café as "creepy," he explained his reasons for arriving at a different initial response to the work of art. Sarah, considering Andy's comments, explained the reasons for her response. As the conversation developed, Sarah and Andy finally arrived at a consensus about the overall mood expressed in the painting by agreeing that the cafe looked "hazy" and "depressing". Their conclusion about the effectiveness of van Gogh's work is the result of collaboration between two individuals who willingly and effectively alternated between roles in the cognitive apprenticeship. Each came

away from the discussion with an understanding of the artwork and its concept that was individually mined and forged through social discourse. The result is that Andy and Sarah had a grasp of the intricacies of the aesthetic puzzle they debated. Their final assessment, and its corresponding WebCT discussion message, provides evidence of the depth of understanding such an e-learning experience can provide.

Group One on Axis C, Electronic Pedagogy: Teaching as Diagnosis

Axis C, electronic pedagogy, concerns implementing different online teaching techniques. My pedagogical responsibilities for the e-leaning event extended beyond the half-hour during which Andy and Sarah conducted their chat; they included the design and initiation of the activity as well as it eventual conclusion. The teacher's role is always one with many facets. To have a successful e-learning event, one that is beneficial to students, the online educator must attend to concerns related to the creation, implementation, and assessment of the lesson. These three components of a lesson, when intact, signal a complete teaching and learning experience.

My approach to teaching during the online chat was highly student-centered, in general. There were some moments of teacher-centeredness, particularly when I gave the instructions for the way the groups were to work during the learning event. However, I functioned primarily in a supporting role throughout much of Andy and Sarah's online chat. In consideration of my relative silence throughout much of group one's discussion, I must characterize my pedagogical strategy as having been extremely student-centered. It is true that I had created the environment for the e-learning event to occur and that I was present in the chat room for nearly the entire length of the online chat. However, I did not interfere with the conversation that Sarah and Andy had with one another. I only sent them one text message throughout the duration of their chat,

although I had been keeping an eye on their progress throughout the conversation. The message I sent them was one that I sent to all of the groups near the end of their small group work. It contained important instructions and guidance for the transition they would shortly be making into a chat with the entire class. My message provided the focus that the students would need to move into an online environment that would promote the community of inquiry.

Therefore, my teaching strategy is *teaching as diagnosis* (see Fig. 5.11). As a diagnostician, I was not active in direct instruction but was concerned with creating an online learning environment that would make an intellectually challenging e-learning event possible.

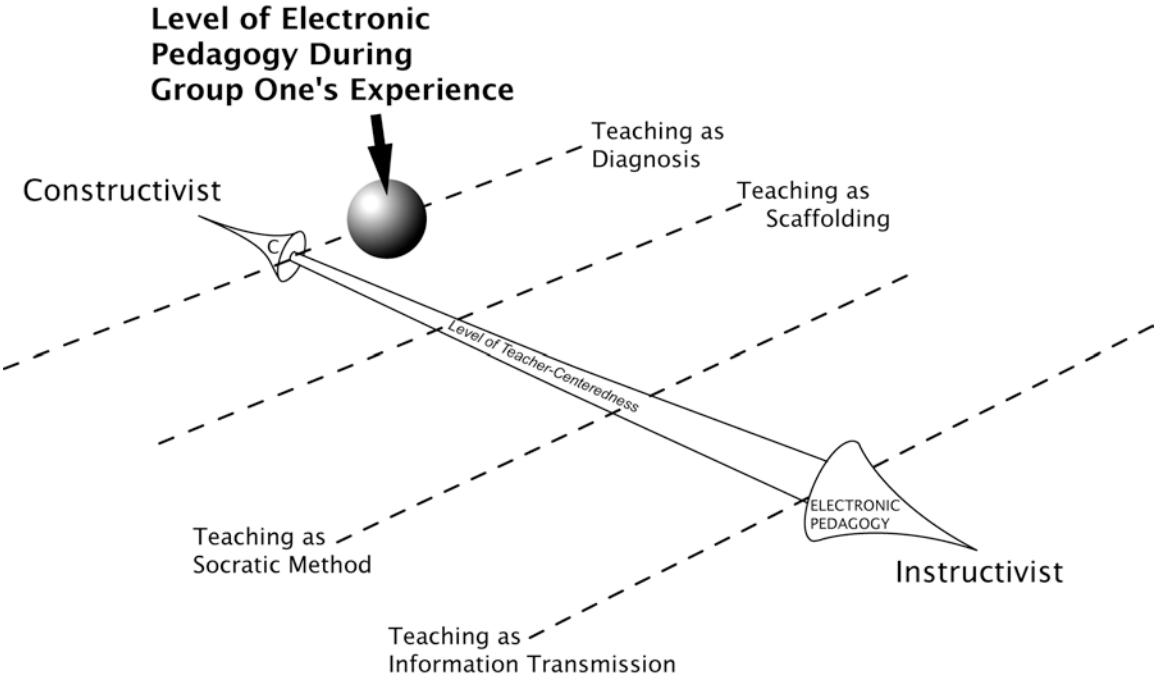

Fig. 5.11. Level of electronic pedagogy I utilized during the online chat.

I initiated this opportunity for my students to hold an online chat so that they could utilize their discussions of real art objects to flesh out some of the concepts they had been studying throughout the semester. It seemed appropriate for them to hold such discussions at the late point

in the semester, since there had been earlier e-learning small group chat experiences. Students were responsible for the bulk of their activities. They prompted one another toward successful completion of the challenging assignment as they took their discussions in the direction that they saw fit to answer the questions about their given *puzzle about art*. Essentially, by embracing a *teaching as diagnosis* strategy of pedagogy, I became less that the students could become more.

This strategy is a precarious one to use. Because of its extreme student-centeredness, students have the freedom to take the e-learning experience in many different directions. As seen in group one's work, confusion and chaos can dominate much of the initial moments of the activity. Andy and Sarah agreed that the small group chat seemed chaotic, which was, for Andy, a reflection of the chaos of the entire class. Because I adhered to a teaching as diagnosis teaching strategy, I had to refrain from dominating the classroom. The vacuum created in my absence made way for any number of hazards to the e-learning event. I made a choice to remove myself from the virtual classroom during the formation of the small chat groups.

My decision speaks to one of the issues I faced in teaching online, that of trying to achieve a balance between confusion and complacency. Confusion, as seen throughout these stories of the online chat, can be both disastrous and challenging. The confusion forced students out of their comfort zones as they attempted to make sense of a disorienting learning environment. Complacency can foster students' sense of comfort and confidence in their teacher's authority while it numbs the mind and dulls the senses. Like Deborah Loewenberg Ball (1993), I struggle with where these disparate ideals effectively intertwine to make a satisfactory and intellectually challenging classroom. As she rightly concludes, "The community can also be a stimulus for confusion" (p. 394). I was, and still am, comfortable with the kind of teaching strategy I used in the online chat. As I have pointed out in this section, there are tactical changes

I might have made in the presentation of the learning activity. However, I was pleased with the rich outcomes produced in the dynamic e-learning environment of the community of inquiry.

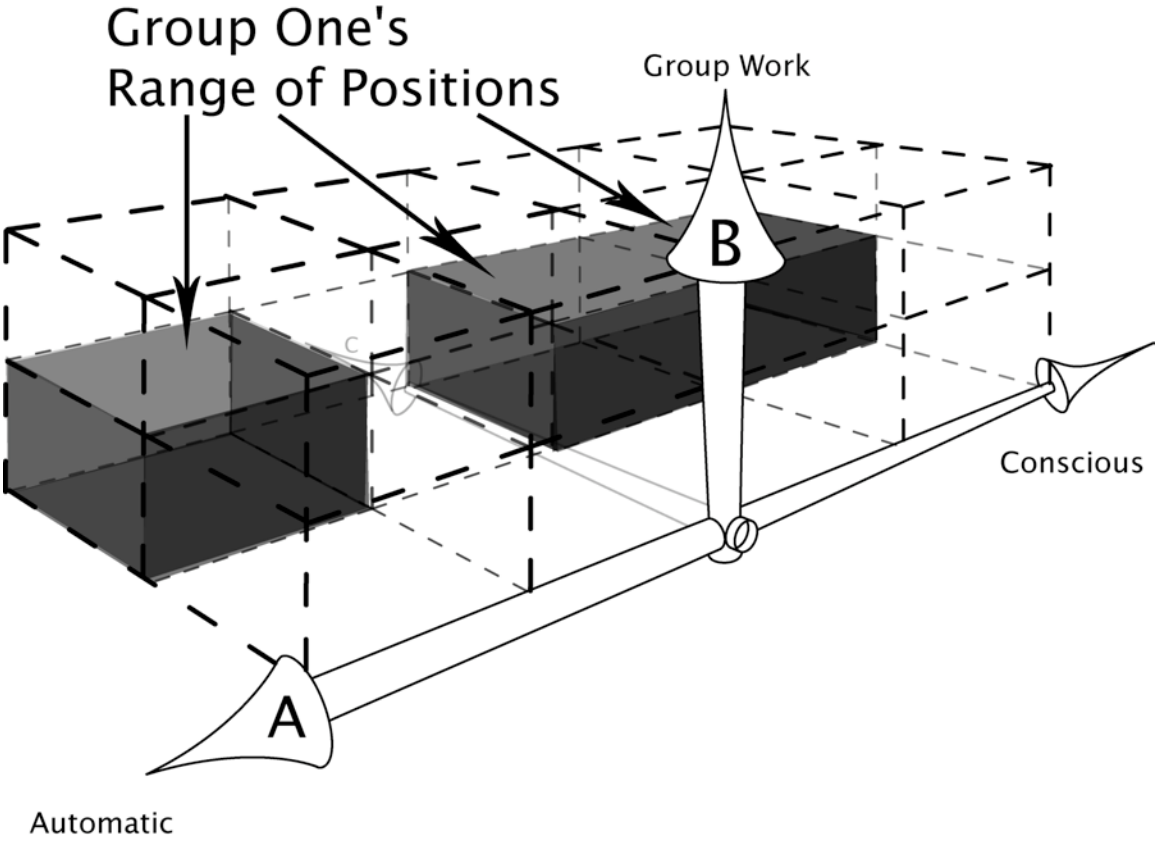

Fig. 5.12. Group one's positions on the Map of E-Learning.

To conclude the work of interpretation, it is necessary to plot the nature of this e-learning event on the Map of E-Learning. Group one's positions are shown as blocks rather than points because of the two pedagogical strategies I used in the online chat, as seen in the two shaded areas seen in Figure 5.12.

The entirety of group one's activities is contained within the community of inquiry demarcated by the Map of E-Learning. Sarah and Andy engaged in academic work that required

them to work within the confines of the community of inquiry. Requiring them to build meaning collaboratively as they discovered information facilitated their success.

Appraising the Effectiveness of Group One's Online Chat

Sarah and Andy made their experience with the online chat a successful one. Functioning in a community of inquiry, they were engaged in meaningful learning as they completed their online activities. The way in which they navigated through the community of inquiry during their chat was through a range of information processing levels. The e-learning event prompted them to engage in cognitive tasks such as searching for information, pulling that information into their discussion, analyzing it in terms of what they had learned previously in the class, filtering their analyses through each other's understanding of the issues at hand, and utilizing that socially constructed knowledge in a practical application.

The thorough written synopsis that Sarah posted on the WebCT Discussion Board provides evidence of the success of group one's process. Before she did so, however, Sarah asked Andy to provide her with feedback about the accuracy of her statements. Again, the pair was involved with the important task of co-constructing knowledge by refining their newly acquired understanding through one another's perspectives. Andy apparently agreed to support Laura in her assessment of the painting. They were satisfied with one another's work, and were ready to offer their conclusions to the entire class in the General Chat room of WebCT, as I had directed.

Implications for Teaching

In evaluating the work that Sarah and Andy did in their online chat, an important lesson about my teaching is learned. It is true that my goal for the online chat was to provide the venue for small group discussion about a given topic. I created the environment whereby this discussion could occur by attending to specific aspects of the e-learning event. First, I provided

problems for students to solve. These problems, in the form of *puzzles about art,* provided the topics that the small groups discussed in their online chats. In addition, I gave the students occasional directions for their work. Although the direction I gave the students at the beginning of the class was not as clear and concise as it should have been, the direction I provided near the end of the online chat was helpful in keeping the discussions focused towards the completion of the class assignment.

However, I could have done more to facilitate greater success in the online chat. This seems particularly clear in the context of the collaborative activity required for success in this e-learning event. In the process of online collaborative activity, several areas need attention. Palloff and Pratt (2005) suggest five phases of collaborative activity. These phases of collaborative activity are defined according to the role the teacher must play in each of them: set the stage, create the environment, model the process, guide the process, and evaluate the process. I will explain, briefly, each of these five phases as I describe how I was or was not attending to each one in the online chat.

The Phases of Collaboration

1) Set the stage.

To *set the stage* for collaboration, an instructor must explain to students why collaborative activity is important and provide guidelines for completing the work (Palloff & Pratt, 2005). Essentially, the stage is set for collaborative activity when a teacher ensures that the students understand the agenda for the activity, know how they are to accomplish the agenda, and can comfortably use the technology involved in the activity. I partially attended to setting the stage for this online chat. I knew that my students were comfortable with the technology they would be using in their discussions, since they had successfully utilized the WebCT chat rooms

several times previously in the semester. Through these previous experiences, the students developed a sense of the importance of collaboration. However, it is obvious that the way I presented the agenda for the collaborative activity in my initial instructions was not clear. Students asked questions, initially, to clarify their assignment and the method by which they would complete it. I need to make sure that students are clear about what they are expected to do in an e-learning event. One simple way to do this is through "checks for understanding". These checks could take the form of an interactive poll when using the Horizon Wimba student poll. The PowerPoint slide would display a simple question, to which students could respond. Their answers could illuminate their level of understanding. If they need more instruction, the teacher could provide it the continue setting the stage.

2) Create the environment.

To *create the environment* for collaborative activity, a teacher must establish a location for students to meet with clear guidelines regarding how students should conduct their meetings. I thought I had attended to this at the beginning of the online chat because I had established a *private* discussion topic for each of the five groups. Unfortunately, I did not provide instructions within each group's private discussion topic regarding the means by which the group would complete their activities. I could have simply indicated the chat room in which each group was to do its work. Additionally, it would have been beneficial in I had assigned certain roles to each member of the group, so that each student would have had a job to complete in contribution to the collaborative work.

3) Model the process.

A teacher helps students understand his or her level of commitment to the collaborative process by modeling it in teaching. Palloff and Pratt (2005) note: "By modeling collaborative

behavior in the course and by allowing students to negotiate some of the parameters within which they will work with one another and with the instructor, the instructor demonstrates what good collaboration looks like" (p. 22). I attended to modeling the collaborative process in one important way, by negotiating the topics of discussion and accompanying course readings with the students. This aspect of the course exemplified the collaborative process in that students were required to sign up as discussion facilitators for eight of the ten asynchronous WebCT Bulletin Board discussions. Pairs of students selected discussion topics of personal interest related to the world of art. Readings, which the discussion facilitators selected, accompanied each topic. All participants had equal access to readings because they were from websites or our course textbook. Most of these discussions were rich and interesting, benefiting from maximum buy-in by the students. This aspect of the course provided a tangible way that students could grasp my willingness to collaborate with them in our class assignments. I think the way that I designed the asynchronous discussions to successfully model the collaborative process translated directly into the success that most of the online chat groups had in their collaborative work.

4) Guide the process.

To *guide the process* of collaborative activity, a teacher ensures that students understand that he or she is interested and involved in the students' work. As a model, the teacher demonstrates how collaboration occurs by practicing it in his or her teaching. As a guide, the teacher communicates a sense of responsibility for the students' collaborative activity by being a part of it. A teacher must maintain visibility in his or her participation in the collaborative work. Palloff and Pratt (2005) recommend that a teacher should let "students know in advance how the instructor intends to be involved with the process and how he or she plans to guide it…" (p. 23). As the collaborative activity begins, students can have confidence that their teacher will be

participating in the way(s) he or she discussed in advance. This sense of confidence will promote student participation from the very beginning of the collaborative activity. Then, as the collaboration continues, a teacher should make his or her presence known, being careful not to commandeer the collaborative activity, nor self-efface to the point of disappearance. In evaluating my effectiveness in guiding the students' collaborative activity in the online chat, I recognize that I did not tell them how I would be involved and that my subsequent silence possibly hindered the students' work. Near the end of the chat, I did make a short comment to give the students direction regarding the closing activity of the online chat. However, I should have done much more. Perhaps an occasional word of approval, or a confirmation of understanding, would have been beneficial to encourage the students as they worked.

5) Evaluate the process.

The concluding phase of every collaborative activity should be to *evaluate the process*. By doing so, an instructor can discern how effective the learning activity was. Additionally, evaluation of the collaborative process provides the means by which students can assess their own experiences. To achieve both ends, Palloff and Pratt (2005) "strongly encourage the inclusion of student self-assessment as a critical component of performance in an online course containing collaborative activity" (pp. 23-4). I neglected this phase of the collaborative process during the online chat in my class. Students did not have the opportunity to reflect upon how their collaboration contributed to their own or others' learning. A brief period of reflection could have been a part of the chat's conclusion to help provide closure on the e-learning event. A summative evaluation could also have been included at the end of the semester. The inclusion of such an evaluative element in the online chat would have been extremely beneficial to the students as they wrapped up their experiences with the e-learning event.

Concluding the Online Chat

It was important to me to draw the online chat to a meaningful close. I wanted students to have the chance to share the results of their discussions with one another in a more formal way. To accomplish this, we met as a whole group in one of the WebCT chat rooms at the end of the class period. Students were given a bit of direction about closing their work in small group discussion. I wrote to each group's chat with instructions about sharing their work with the whole group. An analysis of the discourse generated during this final half-hour of the online chat, in which the students ended the day's activities, helps in evaluating the concluding events of the online chat.

Setting the Ground Rules for Whole Group Chat

One by one, the students, as instructed, enter the General Chat room of WebCT at 3:30. I quickly remember that the General Chat room does not generate a transcript of the conversation. Since it was extremely important that I have an archive of our chat room activities, I ask my students to enter Room One instead. They trickle in as if weary from the day's many activities. I see that Chul and Jason, the members of chat group four, have finally connected with one another. A few minutes later, after the dust has settled, ten of my sixteen students have assembled in the room. I begin the debriefing.

ROBERT QUINN>>has everyone had a chance to read the responses, yet?

The students respond affirmatively, and I continue. Since the previous whole group online chat had been a disaster, I knew that it was essential to lay some ground rules for this to be a more successful experience. I treaded carefully, remembering Palloff and Pratt's (2003) admonition: "Chat can be an overwhelming experience if it is not moderated well and if too many students are involved" (p. 25). I wanted the students to be involved in establishing the ground rules, too. My next steps were taken carefully to ensure that students felt a part of the decision making

process. I ask the students to suggest some rules, which they quickly do. Then, I suggest a guideline.

> ROBERT QUINN>>since we don't know when someone is typing, why don't you type an elipses (...) when you are preparing a statement?

The students agree that my suggestion is a good one, so we begin.

Group One Shares the Results of Their Chat

With the foundation laid, I was convinced that the whole group chat could be beneficial for everyone involved. Thankfully, Sarah and Andy from group one take the lead in continuing the development of a discussion environment that honored everyone's voice while maintaining a sense of direction and purpose. I try to promote Andy and Sarah's leadership in the discussion by asking them to answer an open-ended question.

> ROBERT QUINN>>Group 1, what kinds of things did you discuss that led to your discussion message response?

Pedagogically speaking, I made at least one mistake by asking this question. I had made an assumption that all of the students had read the discussion message response to which I referred. Even though six of the ten students present at the time had told me earlier in the whole group discussion that they had read the responses, it was unwise not to offer a brief synopsis of group one's response *before* they began to enumerate the reasons they formulated that response. I could have started my open-ended question with a simply stated overview of what the group had concluded. That statement would have brought all of the students to nearly the same understanding of group one's argument, before they began to state their justifications.

Instead, Andy and Sarah summarize their discussion of van Gogh's *Night Café* without providing any contextual information. Thankfully, since the class had extra time to read their peers' postings, most of the students knew about the discussion topic. Sarah began.

Sarah Morello>>we discussed the overall feelings we had when we looked at the painting

Andy Metzker>>we discussed colors

Andy Metzker>>we discussed composition

Sarah Morello>>we also discussed whether or not we thought it was ugly

Several students offer their points of view. I summarize.

ROBERT QUINN>>ah ha...you've put some tangible qualifications of what defines ugly and pretty, except for the subjectivities of an individual's taste?

This summarization is my attempt to move the conversation to a close. Unfortunately, my final comment is a bit obtuse, particularly with its misplaced question mark. Andy follows up with a real question.

Andy Metzker>>did anyone find the work ugly?

Several students share their opinions.

Devolution and Conclusion of the Whole Group Discussion

It was encouraging to see the students sharing their personal preferences about the work so freely. I was also thrilled to see Andy take the role of the discussion facilitator, *albeit* for a brief moment. I started feeling like group one's discussion was running out of steam. Almost ten minutes had elapsed since we first assembled in this chat room, and we are drawing precariously close to the end of class. I move things along by asking group two to begin. The whole group chat continues in this manner for the next fifteen minutes. At the close of the discussions by both groups two and three, I pose a question for the class to consider. The question relates to the content we had briefly discussed in the chat, and serves as a transition to the next group's share time.

I then invite group four to present their findings, and with only a couple of minutes remaining in the class period, we embark upon group four's discussion. Only, this time, the discussion does not go as smoothly. Confusion begins to run rampant amongst the students as they dart off to their appointments. All of the order that we had established with our thoughtfully devised ground rules disintegrates. It begins when Jason cannot figure out how to cancel the private chat message he has started. He wants to submit a comment that everyone can see, of course, since his group is presenting. He finally submits a message.

> Jason Foster>>We looked at a big burger. a group of college kids made a big ketchup bottle to accompany it. We think they made this to mock 'pop art' and to slap the face of the gallery which purchased the piece for $10000.

Then, the floodgates open. It is 4:30, and things are going badly. First, Catherine leaves. Then, Amanda speaks out of turn. As group five's spokesperson, perhaps she wants to make sure that her group's efforts are recognized. We have barely begun our discussion of group four's issue when she throws us a curve ball.

> AMANDA PICKINS>>I posted what we discussed but it obviously didn't make it there. Anyway we discussed the pile of bricks and whether or not it should be considered art. I think its like the rest of these that we have discussed, it is all about your own opinion. At first we didn't think it was art, but damon said that bricks can be layed in different patterns in order to express a particular feeling or emotion. The way those specific bricks were layed is a reflection of the artist's own talent. Therefore, our group decided it was art, however it wasn't good art.

Then, she leaves, too. One by one, a handful of the students leave. The environment quickly becomes disorienting. I lost what little control I had over the situation. The students seem to feel as though they have served their time with me for the day. By all accounts, my class is over. There are so many loose ends I want to tie up. The few remaining students are understandably confused. I am, too. I cannot fathom how what had once been an interesting and fruitful discussion has unraveled into drivel. I regain my composure and aim for the summary I should have attempted ten minutes earlier.

> ROBERT QUINN>>it seems that certain people's intentions don't matter as much as other people's in the creation of art.

I ask the students if they think that my summary is accurate and if they think it is an appropriate conclusion. We have an interesting exchange for a few minutes, after which time Chul turns the conversation toward a purely friendly conversation by asking me about how I play the harmonica. We banter a bit; then, I say my goodbyes to him and the other two remaining students. It had been a full class period, with so many shining points of brilliance and lackluster blots of nebulosity. There are lessons to learn here.

Implications for Teaching

The first lesson I learned is about the importance of closure in my teaching. In the whole group discussion, I was more interested in the various groups sharing their findings. While this is certainly a valuable activity, we did not have enough time to really mine the deeper issues that I wanted to explore with the students. The superficiality and brevity of each small group's discussion did not permit us any greater insight into the aesthetic issue than each group's already posted discussion message posting. The students could have read and responded to those discussion postings on their own time, perhaps as a homework assignment.

I could have used entirety of the whole group chat as a time of closure. The statement and question (regarding the disparity between different people's intentions in the creation of art) that I combined in the closing moments of the after-class discussion would have served as a wonderfully rich source of discussion amongst the whole group, if only I had introduced it at the very beginning of our time together. Then, as students chatted about this topic, I would have woven supplementary points of evidence from each small group's discussion. This way, there would have been a much better sense of the interconnectedness of all of the issues the small groups had been discussing. Students would have been presented with the opportunity to see how their thoughts and conclusions related to those of their peers and for what reasons. More importantly, a meaningful time of closure provides an opportunity for students to link the day's activities and discussion with previous material and future class events. Davis (1993) writes: "A well-planned conclusion rounds out the presentation, ties up loose ends, suggests ways for students to follow up on the lecture, and gives students a sense of closure" (p. 116-7). Her reminder seems to carry much more significance when I think about the few opportunities that I actually had to create a well-planned conclusion in any of the six synchronous class meetings throughout the semester.

The second lesson I learned through the whole group online chat provides yet another glimpse into the nature of the online learner. Specifically, I learned that e-learning can amplify certain student habits in such a way as to make those habits intolerable. One such student habit is something I call *the shuffle*. The shuffle is a period of tangible impatience that typically occurs at the end of the class period as students collectively anticipate dismissal. The shuffle often involves increased lack of attention among students as evidenced by their frequent glances at the clock, putting away their materials, zipping their book bags, or shifting in their seats. Sometimes,

students are so brash as to even begin leaving the classroom, particularly in a large lecture hall class such as mine. These signs of the shuffle are commonplace in the traditional face-to-face classroom.

What does the shuffle look like in the virtual classroom? I noticed in this online chat that my students were apt to disregard the current activity in order to fulfill some item of business. Often, students' disruptive activity during the shuffle was completely disrespectful and antithetical to the kind of learning environment we had collaboratively established. For example, when the end of class approached, Jacqueline issued a single question mark as group four formulated their summary statement. I immediately addressed her, since the class had agreed that a question mark would signal when someone wanted to ask a question. After receiving no response from her for several minutes, Jason specifically asked her if she had a question. Her response (that the question was really intended for Tricia) indicated that she was in the midst of preparing to log off when she asked the question. Her unwillingness to disclose the question seems to prove that it was about a topic not related to the assignment.

Additionally, the shuffle in the virtual classroom results in a completely disorienting and chaotic situation that is unlike anything I have experienced in the face-to-face classroom. This seems particularly true when I consider the sheer numbers of students who felt completely comfortable leaving the online chat when the end of class had arrived. Not only did the students feel comfortable leaving, despite the fact that our conversation was still in progress, they announced their departure by telling us that they were leaving! These announcements created more havoc and added to the confusion of the mass exodus. In contrast to the productive chaos of group one's beginnings, the shuffle resulted in disruptive chaos.

Fundamentally, the online classroom is a place absent of the visual and physical cues that accompany much of traditional face-to-face communication (Palloff & Pratt, 2003). The virtual student may feel able to be free to act as s/he wishes in the absence of these visual and physical cues. This perceived freedom was certainly at play in the conduct of the students during the end of the whole group chat. Their actions in the virtual classroom were in direct contrast to the actions of my typical face-to-face students. The last few minutes of class rarely get out of control in my traditional face-to-face classroom. Perhaps students are hesitant to leave the classroom because I might see them, and they are afraid there might be consequences. Perhaps they act more respectful because I am physically present with them in the room.

How, then, might I deal with this period of time in the online classroom? A successful technique in the traditional face-to-face lecture hall class is to establish rules for expected student behavior. For instance, to keep students from packing up and leaving the classroom early a teacher might explicitly state something like, "You are mine until 4:30." I never attended to such rules for student behavior in the online chat. We did establish rules for the way the discussion would occur, but I did not address the manner in which I expected students to conduct themselves. It is important to make such expectations known, and to remind students of them every time the class meets synchronously, if necessary. Another way in which I might have avoided this time period is to have closed the session earlier. If I had started a well-planned conclusion fifteen minutes earlier than I did, the class would have been able to focus a little better on the topic of discussion before the class period ended.

CHAPTER SIX

The Case of the Webpage Creation

Each student in the online art appreciation class was required to create and publish a personal webpage. The homepage was to include eight items: his or her picture, a brief paragraph of self-description, an artist's statement (the result of the final exam question), links to websites of personal interest, an image of each of the two personal artworks completed as class assignments, and an accompanying written explanation of each. This assignment required students to demonstrate that they could represent themselves to others in an electronic portfolio. Including a hands-on art making experience in my online class reflected the third objective of the course: students will engage in active involvement with art making processes to discover the way that the process of art production allows personal construction of meaning.

For the first item, a student needed to upload a digital photograph to the WebCT site I created for the class. The tools on our class WebCT site provided the resources to easily create the textual items, such as the links and written endeavor explanations. To create the images of the two personal artworks, the use of digital imaging software such as Adobe Photoshop, Corel Draw, or Microsoft Paint, to name a few, was necessary. Having access to one of these software programs was a requirement for participation in the online group; however, I found that several students were unfamiliar with how to use them. Even though students were required to have access to such software programs, it became evident early in the semester that the assignment was going to be a difficult one for many of the students.

Over the course of the semester, students tackled the various aspects of this assignment. Sometimes, in doing so, the students exercised creativity and intelligence to achieve success. At

other times, the students called upon the resources that were available to them through their peers and their teacher. Occasionally, a student would run into an impasse as they attempted to fulfill some aspect of the assignment. The network of paths students took in accomplishing their goals generated a unique e-learning environment.

In this chapter, I tell the story of one such network generated by one student, Amanda Pickins. Amanda's story is particularly illustrative, as she is a student who fully utilizes the resources available to her. Although at the beginning the course she described herself as "very slow with computers," she overcame adversity to achieve success in this assignment by creating and publishing a personal webpage.

Throughout the story of Amanda's journey through and beyond the community of inquiry, I attempt to answer several questions pertaining to this study. The first question is a reiteration of my primary research question: What do educational events, such as classroom lectures, small group work, student discourse, art making, and teacher-student discourse, look like when post-secondary art appreciation is taught online? Throughout this chapter, I want to also explore the following sub-questions: When I address specific problems with students, what is the nature of my discussion with them? When the educational problem centers on the creation of an art object, how does the community of inquiry respond?

Amanda's Story

Amanda was excited about learning how to take a class online. She had just transferred to the University of Georgia from Valdosta State University in southern Georgia and was still adjusting. The big University, with all it had to offer, required some getting used to for a girl who had lived in the small town of Valdosta all of her life. The art appreciation class would also require more major adjustment in how she thought about studying and learning.

Valdosta, or "Val-vegas" as Amanda called it, had been a wonderful place to grow up. Her parents raised her on Valdosta Wildcats football, which was the pulse of the southern town and still a source of great pride for her. In her introductory discussion posting, she wrote about how much she was honored to have cheered for the team.

Amanda's lifelong fondness for football and cheerleading led her to choose sports broadcasting as her major. Cheerleading seemed to still hold a place of prominence in her life. As a former cheerleader, she sensed that she was always in front of others; therefore, she kept her silky platinum blonde hair perfectly placed. Amanda attended to her appearance very carefully. It was clear how important her appearance was to her when we were chatting about our personal styles in one of the online class lecture discussions. When defining her own personal style, she wrote: "I like to have that double take style where you make the fellows turn around and take a double take" (personal communication, June 17, 2004).

Amanda was exuberant, sociable, and sincerely interested in people. She often initiated conversations of a personal nature during online chats to establish relationships with her peers. Her outgoing personality was a source of strength in the challenging environment of the online art appreciation class. She would find success in the creation of her personal webpage, in spite of the many adversities she faced along the way.

Vignette #1: Amanda's Need for Help

Video Journal Reflection: June 10, 2004

> *Today I got questions like, Do I need to be computer savvy to be able to do this online course? I encouraged the students that didn't know a thing about computers to continue to be in the online group since I did want a wide variety of users, both the experienced and the inexperienced, in my online group. One girl asked to meet with me before class tomorrow to get help with some of the technologies that we're using for the course. And, of course, I was happy to do that.*

June 11, 2004

As Amanda waits for me to meet her in the computer lab at the art school for our face-to-face tutoring session, she is filled with the uncertainty that had seized her ever since the end of our first class meeting yesterday. *Why did I sign up to take this class online?* she thinks. *I don't know how to work computers!* Amanda slumps in the computer lab's stiff blue plastic chair. She tries to clear the doubts from her mind as she stares at the computers all around her. Amanda's face brightens when I walk into the room. We exchange pleasantries for a few minutes.

"I really don't know anything 'bout computers," she declares.

"That's okay, Amanda," I say. "Like I told you yesterday, I'm really glad you are part of the online group." We quickly get down to business. I know she needs help with the basics of the software we will be using throughout the semester. Although I had demonstrated how to use WebCT and Horizon Live in class, she cannot remember how to access the essential areas in either program. I walk her through the login procedures for both of these online course websites. She has many questions. After half an hour or so, she feels like she understands how to use WebCT and Horizon Live for our class meetings. I try to encourage her by telling her that she will become quite adept at using both pieces of software as she practices with them throughout the semester.

We only have about fifteen minutes until I need to prepare for the lecture hall class. She quickly asks me how to use Adobe Photoshop. During class the day before, I had explained how to use Photoshop to make and export digital images. The first opportunity to use this skill will come during the upcoming synchronous class meeting on Monday. The assignment is to choose an art object, create a JPEG of it, and then share the JPEG with one another in discussion by

uploading it as an attachment to a discussion message in The Coffeehouse discussion area of our class WebCT site.

After explaining the JPEG creation procedure to her, I think I can guide her through the entire procedure, which might help her feel a little more confident about her abilities and would prepare her for Monday's class. I let her have control of the computer, and direct her every step. Occasionally, she recalls one of the steps I had shown her previously in the WebCT tutorial. She seems to be growing in confidence. I glance at my watch.

"Oh, gosh, Amanda," I say. "I'd better get going! It's almost time for class to start." She says goodbye after thanking me profusely, and I scurry off to prepare for class. Amanda is proud of the progress she has made in her computer abilities. She searches the Internet for an image of a golden retriever, which she has selected to be her art object. She finds a decent one, and saves it onto her computer by dragging it to the desktop as I had shown her. Her fingers work quickly as she logs in to her WebCT account and opens the course website. She navigates to The Coffeehouse right away, where she sees the discussion topic "JPEG Sharing: June 14" which I had pointed out to her. A mouse click on the topic name reveals the option to make the first posting to the topic. She clicks the "Compose Discussion Message" button, and types out a quick and simple message about her art object. "I think anything can be art, yet I pick this particular picture because I have a golden retriever of my own that I love to take pictures of, therefore, I chose this golden retriever as my art project" (personal communication, June 10, 2004).

She almost forgets to attach the picture she had downloaded earlier. She quickly does so (see Figure 6.1) and clicks the "Post" button. Amanda logs off the WebCT site, gathers her things, and hurries off to another appointment.

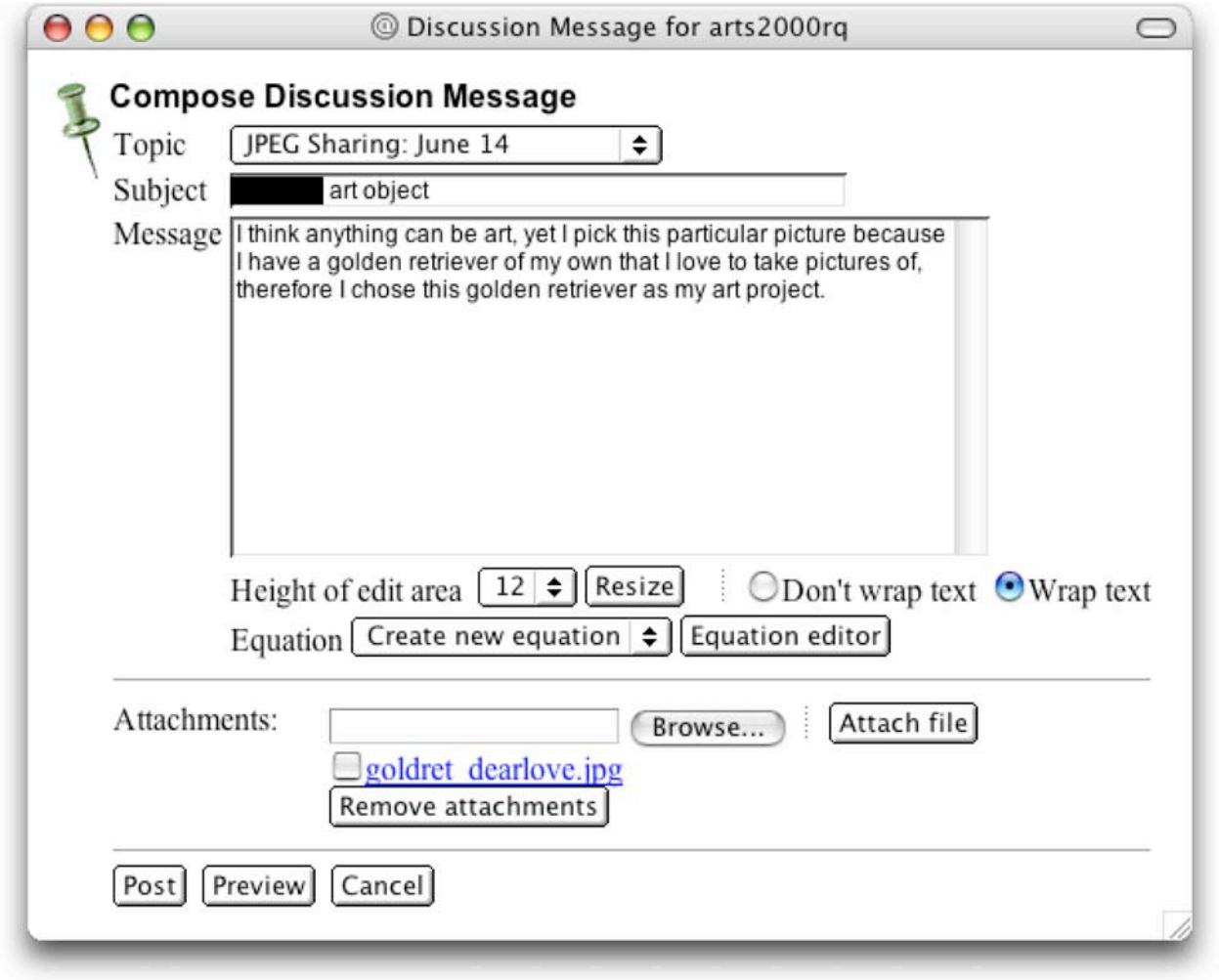

Fig. 6.1. Screenshot of Compose Discussion Message window in WebCT Bulletin Board.

June 17th, 2004

Today, Amanda and her online classmates meet for the second synchronous class meeting of my art appreciation class. In the beginning, things go as they had during the first Horizon Wimba session three days earlier. There were sound problems and misunderstandings, yet no difficulty is insurmountable as more knowledgeable peers assist other students in solving these minor problems. After ten minutes or so, Amanda settles right in to the lecture as she enjoys looking at the artworks I am discussing. Using the Horizon Wimba text chat, Amanda makes frequent comments during the first half of class. Most of her text submissions are

interesting, she thinks, and she really begins to open up with her peers. When I decide to give the students a ten-minute break at the mid-point of the class, she discusses her love of singing in spite of her claim that she could not sing "worth crap." She talks about how difficult her statistics class is, and asks if anyone could help her. Her question makes Travis wonder about the upcoming due date for the class's first art project. He asks if anyone has started the project. The students express various levels of familiarity with the assignment. Someone mentions that it is due on the 22nd, which terrifies Amanda.

amanda_pickins i'm totally lost as to what we need to do for that project

chul_lee did you get the guidelines?

Amanda isn't sure if she had gotten the guidelines for this assignment. The whole chat has gotten her worried. She quickly opens up another Internet browser window and logs into the class WebCT site. She navigates through the Course Content section, where she finds the information about the art project assignment. I had described the assignment, which I called Endeavor One, in depth on the WebCT site. Amanda reads further to see that *Endeavor One* had a subtitle, which was *Ethnographic Research Endeavor: An Investigation of the Self*. There is a lot more reading to do, but she does not want to miss anything that was happening in the Horizon Wimba session. She clicks on its window and sees that I have submitted a text chat message.

robbie_quinn ok, we're back. i can answer your questions about the endeavor later on, or you can e-mail me. But check the website first, OK? Thanks!

We got back on track with the lecture content. Still, Amanda is troubled by the thought of only having five more days to complete her art project, particularly since she hadn't even begun.

What is even more troubling to her is that she wasn't totally clear about what the assignment entailed. She wants to read the rest of the assignment information I had posted on WebCT.

As she listens to the Horizon Wimba lecture, she clicks back over to the open WebCT window and continues reading. This assignment sounds like it is going to be tricky. She reads my instructions about completing the assignment. Amanda's head starts to swim. This assignment is not only going to be tricky, it is going to take some time and research.

Amanda clicks back over to the Horizon Wimba window she had left open, and tries to remain engaged in the lecture session by occassionally submitting a text chat message. As the class goes on, however, she becomes more and more troubled about the assignment. Amanda cannot get over how much work it seemed like she would need to do in order to complete this assignment. She wants to get started right away, but she didn't exactly know how to start. The class drags on, endlessly.

Near the end of the class period, I tell my students to break into small groups to have an online chat about a work of art in their course textbook. Amanda logs into the WebCT General chat room and quickly familiarizes herself with the topic of discussion already underway there. She makes several submissions in order to contribute to the discussion, but the art project plagues her thoughts. Never hesitant about changing the direction of a text chat, she quickly interposes a question about the art project. Her peers respond, in typical fashion, with a few quick answers by telling her that she will be able to figure it out, or that she might want to ask me to help her. While she is thankful for their encouragement and suggestions, Amanda wants something more concrete. As the WebCT chat continues, Amanda asks if someone might be willing to provide her with some help on the art project. Damon Henson writes directly to her in

his next comment. He tells her that he will be happy to help her sometime over the next couple days. He suggests that they set up a time to meet and they exchange phone numbers.

Amanda is rejuvenated by Damon's offer. Judging from his comments in the text chat, she thinks that he seems like someone who knows a lot about computers. More than that, he seems to care enough to help her. As Amanda continues chatting with Damon and the others over the next couple of minutes, she enthusiastically contributes to the conversation she and her peers are having online. The nagging thoughts of the impending art project have ceased; instead, she is looking forward to the challenges ahead. Now that she has an ally, she feels confident that she can overcome any obstacle in her path.

June 21, 2004

Soon after she leaves her apartment for her statistics class this morning, Amanda tries calling Damon Henson. She hears his voicemail greeting, and quickly hangs up. Then, she remembers that they will be able able to chat online during the third synchronous class meeting of my art appreciation class this afternoon.

When the afternoon finally arrives, Amanda eagerly starts up the computer at her apartment and logs into the Horizon Wimba session. She is the first one in the room. As she waits for the rest of the class to join her, she grows more restless. Just seeing the words *Art Appreciation (Quinn)* on the Horizon Wimba screen makes her thoughts about the art project spiral into the abyss from which she had pulled them only days before. Noticing that other people are slowly logging into the Horizon Wimba chat, she types out a quick question.

> amanda_pickins do any of you know how i can download the adobe photo shop onto my computer

After a couple of minutes of silence, Jason replies. He mentions that he has access to the software through the use of the computers in the Student Learning Center on campus, but that he

doesn't know how to use it. Amanda understood, but she still wants some direction from somebody. She decides she will ask about it later, after the rest of her classmates are online.

Before she has a chance to do so, it quickly became clear that there was a problem with the Horizon Wimba session. It would be forty-five minutes until we would learn that the campus network was experiencing some technical diffulty. For the moment, however, the students try to assist one another in fixing the broken audio. Since nothing seems to be working, the students chat about the class. After chatting for almost fifteen minutes Damon asks a question that reminds Amanda of the rapidly approaching deadline of the art project she has yet to begin.

damon_henson has anyone finished their project yet

Between other in-progress chat conversations, Travis replies to Damon's question.

travis_phillips im close

After the vestiges of the other chat topics have lost their hold on the conversation altogether, the students turn their complete attention to the subject of Damon's question.

Amanda was struck by the way that Travis was providing valuable help for Jacqueline as the chat proceeded. It appears that he is guiding her through the entire process via the Horizon Wimba chat while she is working with Adobe Photoshop on her computer. Amanda recognizes that she needs somebody to help her through the process, too. She quickly reminds Damon of his offer to provide her with help.

amanda_pickins i called you this morning damon

Damon's reply seems strange to her.

damon_henson oh ok.... i forgot who it was

Amanda assumes that Damon means he had forgotten that they had exchanged phone numbers. They make no more mention of it until later on in the class period, when another break in the audio sends the class's chat into other off-topic discussions.

During the delay, Amanda and Damon arrange a time to call one another. She is relieved to be one step closer to setting up their meeting, since she cannot put the art project off any longer. She knows she still needs to attend to the last hour of class, however. Once the audio is restored, I direct the students to break up into small group discussions, as they had in the previous class. The groups are listed on the PowerPoint slide display of the Horizon Wimba window. She and Damon are fortuitously in the same group.

Since they are in group one, she opens up chat room one in WebCT. Her group members are there already, and they get right down to the business of discussing a contemporary art work from chapter twenty-five of their textbooks. After selecting and discussing the artwork for a while, Amanda revisits her and Damon's previous conversation so that they can firmly establish their meeting. After some small talk, Amanda and Damon set up a time to meet and outline some tasks they want to try to accomplish during their meeting.

Amanda and Damon go their separate ways in the virtual world. However, their paths were to cross again that afternoon in the physical one. When they did, each of them was surprised to see how very different their imagined projections of one another were from the real person. The shock was only temporary, and they got right to work with the art project. Damon shows Amanda how to use Adobe Photoshop, while Amanda helps Damon devise a topic for the discussion they are to facilitate the day after next. They work for several hours until Amanda has a firm grasp on the basics of Adobe Photoshop. Damon leaves her with a renewed sense of self-confidence and a determination that she will be able to complete the endless list of things she has to do before she submits her art project. She begins immediately.

Interpreting Vignette #1: Understanding Learning as Seeking

In response to the problem of learning online and creating her personal webpage, Amanda faced three obstacles. First, she had very little experience using the technology required for the online art appreciation class. Second, there was not enough time in the short summer semester for her to learn how to use the technology on her own. Third, the entire process seemed so overwhelming to her that she could not figure out where she should begin. Overcoming these obstacles became a primary focus for Amanda as the first two weeks of class elapsed.

Her immediate inclination was to request my assistance, as evidenced by our on-campus meeting on the second day of class. It seems clear that Amanda tackled her online problems in much the same way that she would have tackled her real world problems. She asked for help from me, because she assumed I was the most knowledgeable source for the information she needed.

I helped Amanda by guiding her through the process of submitting the JPEG of her art object, the golden retriever, for the class's first bulletin board discussion topic. I did so by instructing her in a systematic fashion. She physically manipulated the computer's mouse and keyboard to navigate through the steps through which I was leading her. In this way, Amanda was *learning by doing*, a kind of hands-on learning experience that promotes a student's processing of information. It is clear that Amanda understood when she was able to complete the same procedure on her own after I had left her in the computer lab.

After completing the first assignment successfully, Amanda was poised to tackle the second and more complicated problem of creating the first work of art that was to eventually become a part of her personal webpage. However, upon her preliminary investigation of all *Endeavor One* entailed, Amanda quickly became concerned about her lack of preparedness. Her

realization came during the first synchronous class session when she and her peers were chatting with one another in the Horizon Wimba text chat. Instead of turning to me for help this time, however, Amanda sought out the assistance of one of her peers. As before, she identified the individual who seemed to be the most knowledgeable person in the class.

Amanda's persistence in garnering Damon's help with the art project carried over into the following synchronous class session, during which time the two of them set up a time to meet—again in the physical world—and complete their work. Her insistence upon meeting face-to-face is noteworthy. Even though she had been impressed with the way that her peers were working through some of their problems by using the text chat of Horizon Wimba, particularly Travis's conversation with Jacqueline, she felt most comfortable meeting with Damon in person. The connection that she and Damon had shared in the virtual classroom was an approximate substitute for their meeting in real life. Because students could forge relationships with one another, trust was a part of the virtual classroom.

Through her face-to-face meetings with Damon and me, Amanda secured the help she required for the difficulties she had with the online art appreciation course. It is interesting that in the face of adversity, Amanda did not attempt to tackle her problems alone. Instead, she chose to seek a more knowledgeable and capable peer who could accompany her by providing key insights into the assignments she was attempting to complete. Amanda did not want us to complete the assignments *for* her. Rather, she wished for each of us to collaborate with her as she gained strength and self-confidence.

The many steps that Amanda took through the e-learning events can be subdivided into two phases. In the first phase, we see Amanda seeking and securing my help. In the second phase, Amanda asks for and receives help from Damon Henson. Even though there were two

phases in this e-learning event, I have conflated and interpreted them in the same way. This is true because the dynamics of each phase remained constant, except for the identity of the person that provided help for Amanda. As I continue to offer an interpretation this e-learning event, the three realms of e-learning described by the Map of E-Learning will aid in this interpretation. I will discuss each one, citing examples both from my work with Amanda and the help that Damon provided.

Amanda's Location on Axis A, Information Processing Functions: Knowledge Utilization

Axis A of the Map of E-Learning, called *information processing functions*, delineates the four levels at which an individual might process information during an e-learning event. As Amanda tackled the two specific course assignments, she was interested primarily in using the knowledge Damon and I shared with her to accomplish a particular task. Therefore, her level of information processing was at the *knowledge utilization* level. Of the four processes that can come into play at this level of Axis A, *problem solving* most closely corresponds to the kind of work with which Amanda was engaged. In the process of problem solving, a student is meeting a

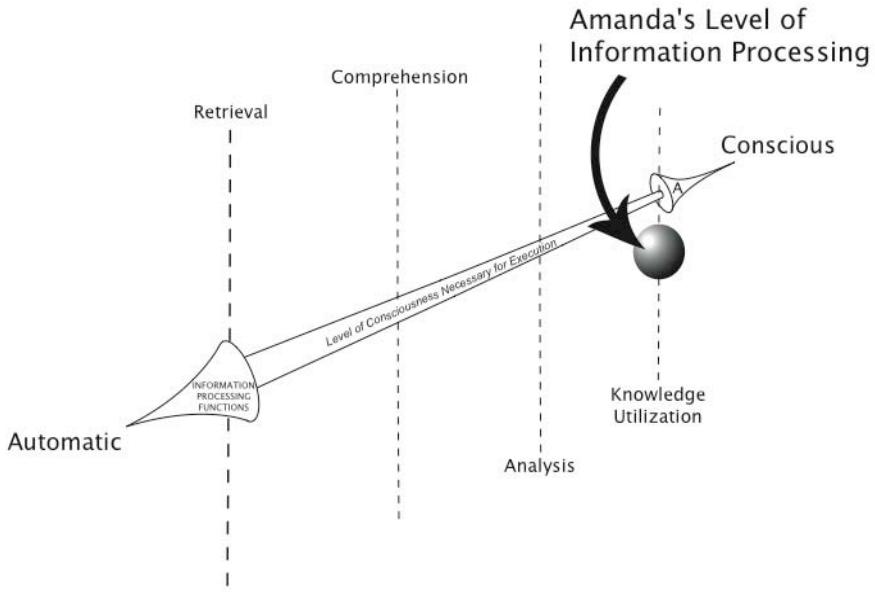

Fig. 6.2. Amanda's level of information processing.

specific goal while overcoming some limitation. Amanda overcame her limited knowledge of the use of computer technology required for the course as she accomplished a particular assignment. For example, after I led her through the process of creating and submitting the JPEG of her selected art object, Amanda utilized the knowledge she had gained to actually fulfill the assignment. She had to consciously utilize her newfound knowledge to find success in the e-learning event. I show the point that best represents Amanda's position on Axis A in Figure 6.2.

Amanda's Location on Axis B, Practitioner Interaction: Cognitive Constructivism

Axis B of the Map of E-Learning, referred to as *practitioner interaction*, describes the level of necessary interaction with a social other during an e-learning event. Throughout phase one of this e-learning event, Amanda and I were in a one-on-one teaching and learning relationship. Similarly, she was in an individualized relationship with Damon during phase two. Damon and I presented opportunities for Amanda to utilize the information she had received during our instruction, and she took advantage of them. In so doing, Amanda made sense of the unfamiliar processes needed for her to succeed in this e-learning event.

Amanda's initial understanding of computer technology was limited. As I explained the procedures she would use in the class, she filtered the information through everything that she knew about computers. As she successfully submitted her discussion message, and its accompanying attachment, Amanda acquired a new framework through which to process future information and knowledge. Because of her individual relationship with me (and subsequently with Damon) as a social other during the e-learning event, the kind of practitioner interaction that most accurately describes Amanda's experience in this e-learning event is *Piaget's cognitive constructivism*. The point shown in Figure 6.3 best represents her station on Axis B.

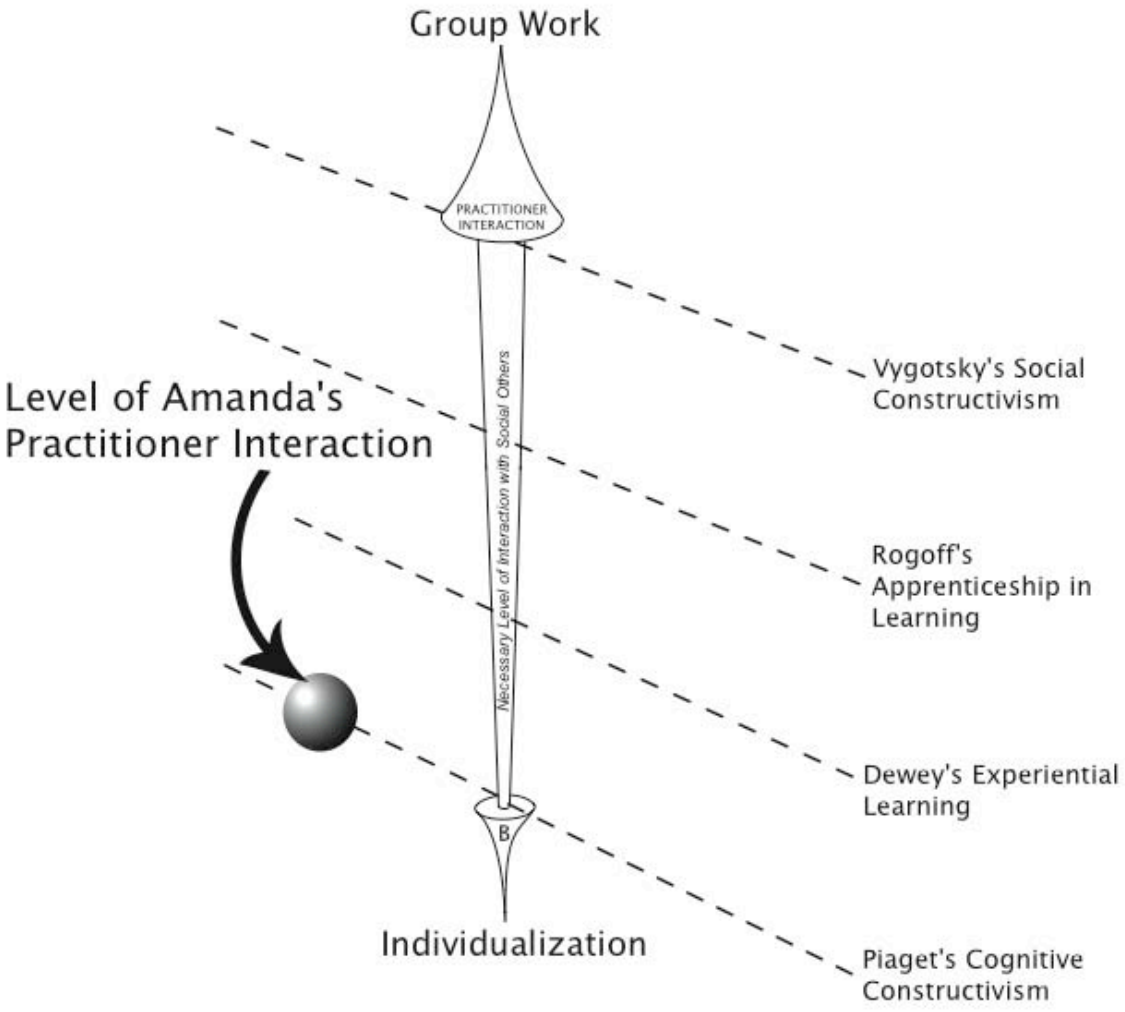

Fig. 6.3. Amanda's level of practitioner interaction.

Amanda's Indefinable Position on Axis C, Electronic Pedagogy

Axis C is the realm of online learning that is concerned with *electronic pedagogy*. Interestingly, I used a teaching strategy that existed outside of the virtual classroom. Interactive computer technology did not mediate the way that I taught Amanda during this e-learning event. While Amanda learned what I taught her using a computer, I taught directly by physical means such as voice and gestures. Amanda arranged a face-to-face meeting with me to help her with her work in a more traditional teaching environment. I willingly obliged, and am equally responsible

for moving the e-learning event to a decidedly non-electronic venue. Essentially, I negated the use of electronic pedagogy through my face-to-face meeting with Amanda.

Damon, too, capitulated to Amanda's request for a face-to-face meeting. It is commendable that he took the time necessary to orient her to the use of Adobe Photoshop. I feel that Damon and Amanda arranged a physical meeting because of the ease with which they could communicate in person. It certainly would have taken a great deal longer for Damon to talk Amanda through the process of using Adobe Photoshop if they had decided to chat online or on the telephone. Additionally, if they had kept their activities online they would have had to make more complicated arrangements for making Damon's software available for Amanda to download and install on her computer. This arrangement might have necessitated the use of a large amount of online server space and a high-speed Internet connection on both individual's computers. The long list of demands for conducting an online consultation must have been too overwhelming for Damon to seriously consider any alternative to the traditional, face-to-face meeting he had with Amanda.

What is of more importance when considering Damon and Amanda's work is my role as the teacher in phase two. I supported Damon and Amanda scheduling a meeting to work together. I wanted to show my availability, but I also wanted them to take care of Amanda's problem on their own. Students need to use each other's knowledge to collaboratively navigate through e-learning events. What I failed to do, unfortunately, is direct them to consider ways in which they might work inside the confines of an *online* learning experience.

The teaching and learning activity throughout the e-learning event took place outside the online *community of inquiry*. Amanda's experience is an *outlier* and cannot be plotted on Axis C of the Map of E-Learning, as shown in the two gray shaded portions of Figure 6.4.

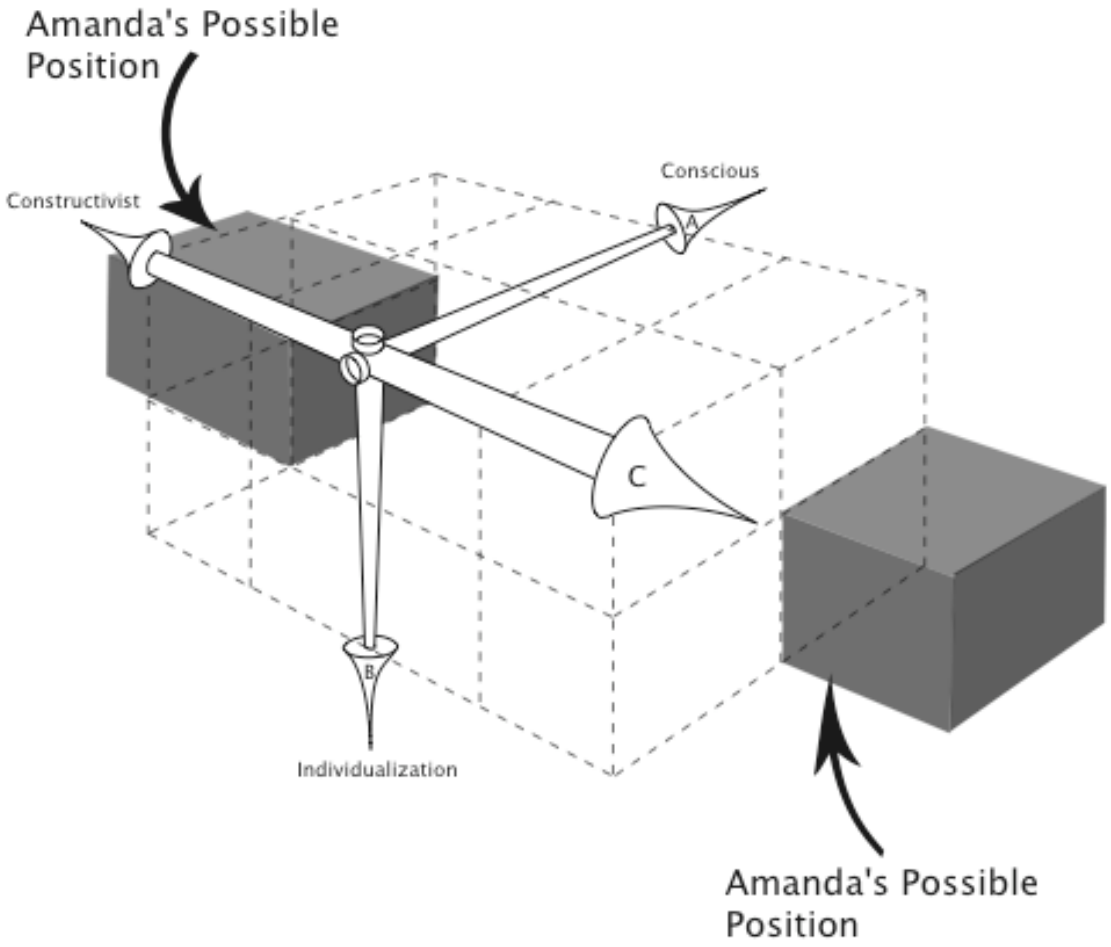

Fig. 6.4. Amanda's possible positions outside of the community of inquiry.

Assessing Amanda's Need for Help

Amanda's experience in the beginning stages of the creation of her webpage is the result of a poorly designed and taught e-learning event. I did not provide the students with the basic tools they needed to achieve success in their work. I assumed that the instruction I provided the students on the first day of class during our only scheduled face-to-face meeting would be

sufficient. However, as Amanda's experience proves, my cursory explanation of the basics of our online art appreciation course was inadequate.

Some enterprising students may have taught themselves to perform the online activities. However, others like Amanda were more comfortable resorting to face-to-face methods that they typically relied upon when they needed help. Amanda was most at ease learning new things with a teacher or a tutor who could show her how to systematically conduct her work. Because I had not arranged for providing such assistance in an online forum, Amanda took the initiative to arrange these physical meetings.

On a more positive note, Amanda successfully completed one of her course assignments because of our meeting. In addition, as will be disclosed in an upcoming section, her meeting with Damon produced positive results. Not only did she complete these two assignments, she gained much needed self-confidence and an important sense of accomplishment. Amanda felt much better about her level of familiarity with the technology in use, and she began to view her developing abilities not as a liability but as a step along the path toward future academic success.

Implications for Teaching

Although Amanda advanced in her academic confidence and problem solving skills, I feel that the primarily negative consequences of Amanda's experience with the e-learning events warrant some change in my future pedagogical practice. One way in which I find room for improvement in this kind of online teaching is the provision of online tutorials. One can create, present, and access online tutorials in a variety of ways.

One important software application that could be used in the creation of such tutorials is a *screen capture* tool. A screen capture tool can create still images of a user's computer screen to show students how their computer screens should look at some point in a procedure or online

activity. Some screen capture tools[4] are more robust, providing the means for a user to record computer desktop activity as s/he performs tasks. One can annotate the movies with helpful text, arrows, or other instructive marks. Additionally, one can add a vocal track to provide students with spoken directions to follow.

After creating the tutorials, one can present them in such a way that students can access them at any time. The screenshots or movies can be uploaded to the course website. One can organize the tutorials in any number of ways for students to use when they need assistance with some aspect of the course. The movies could be accessed by the students whenever necessary. These online tutorials would provide the kind of step-by- step instructions that would benefit a student like Amanda whenever s/he encountered an area of difficulty in completing a class assignment.

This type of "help on demand" approach to teaching online can be extended in such a way as to assist students with other aspects of their coursework in the event that the online tutorials do not address the specific problems that the students might be having. This helpful component of an online course might take the form of a "page-a-peer" service. In this kind of service, students who have an advanced understanding of course material and/or technology could volunteer to serve as peers that are more capable. This select group of learners would be available to help their peers by answering *live help* inquiries that are generated from the course website.

Live help chat applications and services are a popular form of customer service that many web-based businesses currently provide. These kinds of services allow a customer to receive

[4] The screen capture software used for this dissertation is Snapz Pro X for Macintosh computers. It has an optional movie capture feature. More information about this product is available at Ambrosia Software's website. It is located on the World Wide Web at http://www.ambrosiasw.com.

advice from a company representative simply by using an online text chat. The customer can ask questions and gather insight into products and services provided by the business. A course website should also, like a business's website, include a *Frequently Asked Questions* (FAQ) section to assist students with some of the more common difficulties encountered when learning online.

While an online class is far from a business, the practice of connecting those in need with others who can help is a technique that would have been extremely helpful for a student like Amanda. Peers that are more capable might provide answers in a timelier manner if such a "page a peer" inquiries are forwarded to their handheld mobile devices. A full discussion of the logistical details for implementing such a program in an online class is beyond the scope of this writing, but the idea is one that holds some potential for a more successful online learning experience.

Amanda's Breakthrough

Amanda works diligently for a couple of hours on her Endeavor after Damon leaves that afternoon. She feels comfortable working with Adobe Photoshop, particularly the tools that Damon had shown her how to use. After returning from her appointment at the Student Learning Center that night, Amanda is ready to submit her art project. She logs onto the WebCT site, and finds the Discussion Board topic "Endeavor #1" where she is supposed to post her assignment. She sees that I had posted some instructions under a discussion posting called "what to post." She opens up my message, and reads what I had written.

Amanda is so proud of herself for turning in her work ahead of schedule. She realizes that she has forgotten to write out a written response to accompany her collage, as I had instructed.

No big deal, she thinks. *I'll just write one up real quick right now!* She is getting good at doing things spontaneously for this class. Amanda quickly creates a discussion message and pecks out a little spontaneous piece of writing.

She quickly completes the short sequence of operations necessary to attach a file to a discussion message. She attaches her collage file three times, as if to make sure that it sticks. Then, after she is convinced that it has, she clicks the "post" button. She refreshes the web browser to make sure that her discussion message successfully posted. It had. She clicks on the paper clip attachment icon and sees that her attachments, all three of them, are there. She clicks on the name of one of the files to see her digital collage image appear (see Fig. 6.5).

Fig. 6.5. Amanda's artwork for Endeavor One.

Amanda is satisfied with the image she had made. After all, it was her first attempt at making art on the computer. Moreover, she did not really know what she was doing most of the time. Still, she could see how far she had come already in the short couple of weeks since she had first started the class.

Vignette #2: Amanda Builds Her Webpage

The second half of the short summer semester flies by for Amanda. Before she knows it, the final exam week is upon her. She begins to attend to all of the assignments she is supposed to have completed by July 8th. Only three days remain, and she has a lot to do for the art appreciation class. While she is sitting in front of her computer in the early afternoon, Amanda logs in to the class WebCT site and looks at the syllabus in the Course Content area. She wants to try to get a handle on the multiple assignments she still needs to finish. She scrolls down through the syllabus and notices that the paper is due today. She is almost finished with it, so the news is not terribly shocking. She reads further. The second art project, or Endeavor Two, is due on the 8th, as is the final exam. She has started the second endeavor, so she is confident that she can finish it within the next day or so. I had not yet assigned the final exam, so she will not worry about that for now. It is strange to have so little to worry about, even though there seems to be so many things she still has to do. She takes one last quick look at the course calendar on the syllabus, and breathes a quick sigh of relief. For now, at least, she could finish the paper, since it was due by midnight.

Later that evening, I send an "end of the semester checklist" e-mail. One task students are to complete is to informally assess their peers in the online class. I hoped that by including such a process I might gain insight into the activities of the group.

The next day, I get an e-mail response from Amanda; she sounds frantic. She claims that she cannot find her artworks and that she is worried about building her personal webpage. She emphasizes her desire to make her homepage perfect so that she can get an "A" in the class.

Her e-mail concludes with some brief reflections on her peers' activity throughout the course. Amanda's reflection on Damon Henson's role in her successful learning experience during the semester confirms my observations of his assistance with her coursework. I immediately write her back to explain where she should post her collage.

Using WebCT Homepages

I realize, soon thereafter, that using the Homepage tool in WebCT is not entirely easy. It is not until I read Amanda's next e-mail that I realize the difficulty of some of the issues with which she is struggling. She described her confusion regarding the way that her second artwork seemed to have been deleted from her webpage.

I want to see if I can understand what Amanda is grappling with in the creation of her webpage. I immediately log onto the WebCT site with my test account.[5] As I enter the Homepage area of the site, I notice that there are basically seven different ways that the Homepage can be customized: I can modify layout, customize page colors, modify/add background image, modify/add banner image, modify/add hit counter, edit/add upper textblock, and edit/add lower textblock (see Fig. 6.6). One can only manipulate most of these seven aspects of the Homepage in limited, preset ways. For example, the *Modify layout* option only allows a user to choose a one or two column layout for the webpage. A few of the customization options allow a user to insert Hypertext Markup Language (HTML) commands to adjust certain areas of

[5] A WebCT test account is provided to the designer of a course site, if requested. This account allows the designer to view the site, as a student would see it.

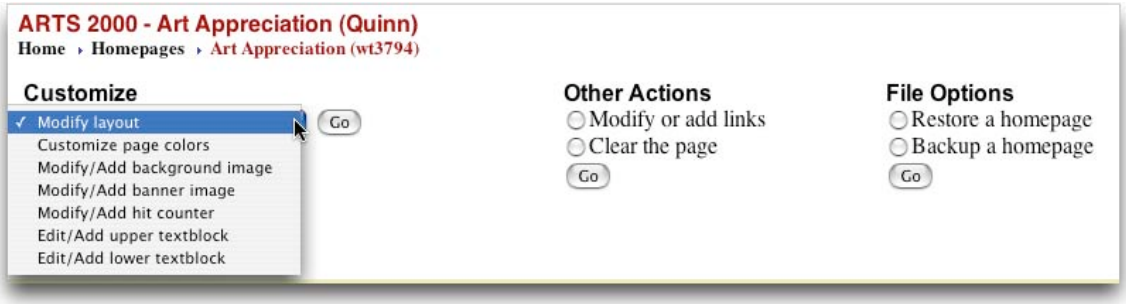

Fig. 6.6. Screenshot of the WebCT Homepage designer options area.

the webpage. For instance, the *Edit/Add upper textblock* option provides a text entry field, into which one can insert HTML "tags" to create certain textual effects such as italics or centered alignment.

After familiarizing myself with these features of the WebCT Homepage area, I start trying a few things to create my own test page. I work through several of the features available to me, and begin to see how confusing the process of creating a webpage might be for my students. After floundering with my own test account's webpage, I take a quick look at Amanda's WebCT Homepage. I hoped that she had figured out how to get the look she wanted on the page. While it looked disjointed, she had obviously attempted to get it into some sort of order. I am pleased to see that Amanda has already completed the second art project I had assigned the class. This second assignment, called *Endeavor Two* (see Appendix E), required the students to design an *avatar* that would serve as a digital representation of the self.

I see that on her Homepage, Amanda has posted a brief written reflection on the artwork, as well as an image of the avatar. It is picture of four girls, one of whom is Amanda. The group is standing in what looks like a bar or club. They have their arms draped over each other's shoulders, and seem to be quite jovial. Contributing to the festive appearance of the image is the shower of simulated confetti that Amanda must have drawn in with a paintbrush tool in Adobe

Photoshop. The multicolored, almost stippled marks cover the entire area of the artwork. A navy blue background with yellow polka dots sets off the entire scene. The final touch for the artwork is a superimposed text phrase, which reads, "A night on the town." Amanda has placed it near the top of the image.

Amanda's Cry for Additional Help

The following afternoon, I receive another e-mail from Amanda. She sounded desperate, claiming that she had accidentally deleted her "A night on the town" collage.

I write her back immediately, hoping that my response would ease some of her worries. I tell her that she and I should arrange a time to meet online to chat through her problems.

Her response came quickly, as if she had been anticipating my e-mail. She agreed that we should try to chat online at nine o'clock that evening in chat room one.

Our online meeting would provide me with an opportunity for which I had been waiting several weeks. It would be a chance for me to conduct, in a synchronous way, one on one basic instruction about some technical aspect of a real course-oriented problem. Other similar scenarios had never materialized since so many of the students were eager to turn to one another for help in times of need such as this. Amanda had been willing to do so previously, as well, when she solicited Damon's help. However, this matter seemed to her to be of a kind where only my help would prove to be sufficient. I would need to make sure that I was prepared to help her.

My Role as an Online Tutor

A little before nine o'clock that night, I log in to my WebCT test account as I had the night before. I continue to experiment with the customization of my test account's Homepage, using HTML tags this time to accomplish some unique customizations. I was making some progress in arriving at the layout I desired for my test account's Homepage, and I felt confident

that Amanda would find my directions very helpful. I check my wristwatch to see that it is 9:02. I immediately open up a new browser window and log into WebCT chat room one, which is where Amanda indicated she would be waiting. I am glad to see her there.

```
Test  Account>>hey Amanda!

AMANDA  PICKINS>>Hey Robbie

Test  Account>>it's robbie

AMANDA  PICKINS>>I figured it was
```

She wasted little time in sharing her bad news with me. She told me that she had been working in the Student Learning Center at the University, and that she had deleted her artwork for *Endeavor Two*. After asking me if I had seen her artwork before it had been deleted, she describes it to me. I confirm that I had seen it when I was looking at the Homepages the night before.

After she began explaining what had happened, I chided her about the importance of backing up her work. However, I could tell she had beaten herself up about her mistake enough, so I try to steer the conversation in a more constructive direction by asking her how she wanted the text on her Homepage to look. After she told me, I began to describe the way that HTML can be used to accomplish the effects she desired. So she could see some examples of what I was describing, I sent the web address of a straightforward HTML tutorial site.[6]

Using the information provided there, I explain how she could use HTML to customize her webpage. I describe the intricate process she could use to center her Homepage's heading. However, Amanda is a bit overwhelmed with all of this information. She is stressed by all the end of the semester tasks she had to do. My direction does not appear to be getting her any farther along in her Homepage creation, and to Amanda, it is simply just one more item on a

[6] The HTML Code Tutorial website is a helpful resource for learning HTML code. It is located on the World Wide Web at http://www.htmlcodetutorial.com.

growing checklist of things to do before tomorrow. She angles for mercy. Her argument is justified, and I reassure her that she will get credit for the second artwork since I saw it before it was deleted.

We seemed to be on a better footing now that some of the weight was off Amanda's shoulders. Then, she asks me a question about another one of the items that were to be included on the students' Homepages: the artist's statement. This artist's statement was to be a response to the final exam question, which was based on two images (see Appendix D), that the students had received the previous day. They had 24 hours to formulate their answer and post it on their WebCT Homepage.

She inquires about starting over with her Homepage design from scratch. I tell her that I want to look at her webpage first, so I quickly click on the other browser window I had left open with my test account's Homepage, and navigate easily to Amanda's webpage. It was still in shambles, but there was a shadow of structure intact. I try to encourage her, and the conversation takes a decidedly more optimistic turn.

```
Test  Account>>ok, looks good so far
Test  Account>>now, let's go through the HTML together really
quickly...
AMANDA  PICKINS>>awesome
```

I guide Amanda through the procedure for creating headings on her Homepage, step-by-step, for a half an hour. I am pleased with the way that she is taking my direction, and utilizing it for a specific purpose. She follows my lead in shaping the webpage with the use of three main headings and corresponding centered artworks and accompanying written responses. She seems to feel like she is getting somewhere rather quickly, since she can see immediate results with

every click of the "update" button on her WebCT Homepage tool. Still, she wants to achieve some more complicated results with her Homepage.

She inquires about the order of the parts of the page. I describe the way that each heading can be sized differently using HTML. She begins demonstrating some understanding of the concepts we have been discussing. It is clear that things are coming together for her as she describes how she wants to have her webpage arranged in terms of the HTML phrases I had introduced. By the way she is writing I can see the spark of motivation reigniting.

Amanda thanks me for my help, and apologizes for keeping me up so late. Was it that late? I peek at the little clock on my laptop. Oh, I could not believe it was already 10:15. The time spent working with Amanda had flown by so quickly. Even though we had bid one another adieu, neither Amanda nor I logs out of the chat. I feel like I should remain available to her if she needs to ask a quick question about something else. Besides, I have a little more online work to do before I can call it a night. Amanda works well into the eleven o'clock hour, putting the final touches on her Homepage. At last, it is complete. It is not up to her "perfectionist" standard, but she is satisfied with what she has been able to accomplish.

Amanda thinks I might be online still, and wants to ask me to take a quick look at the webpage. She checks the WebCT chat room, but I am already logged off. Instead, she types up a quick e-mail thanking me for my help and commenting on how pleased she is with the reconstruction of her Homepage.

I would not read Amanda's e-mail until the next morning. When I do, I open her Homepage to see what she had done (see Figure 6.7). She has made a great deal of progress on the webpage. Her headings were not quite right, particularly since they had errant numbers in

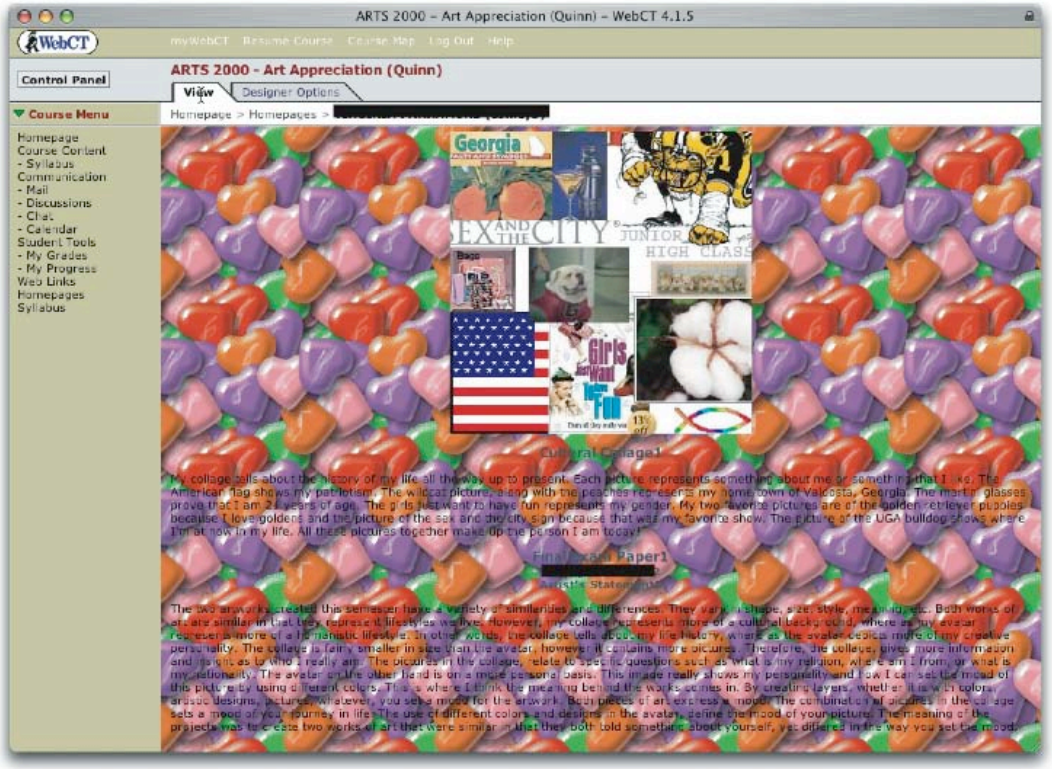

Fig. 6.7. Screenshot of a portion of Amanda's WebCT Homepage.

them from the HTML code she had used, but there was a sense of completion that I had not seen before. Her background, while audacious, was a fitting choice for her personality.

In her haste, Amanda had neglected to include a couple of items on her homepage: her picture, a paragraph of self-description, and links to websites of personal interest. I remembered seeing a picture of her and some of her friends that had been on her Homepage for most of the semester, and that she had had some links to others websites at one point in time. Unfortunately, they were gone now. She was gone, too. All that remained were the traces of her presence left behind in this small corner of cyberspace, where a bit of Amanda – as she was, and as she was becoming—still lingers.

An Explanation of Vignette #2: Learning in Online Relationship

In this part of Amanda's story, we see a student who has been gradually progressing in her work revert to a perceived need for a tutor. She had started the online art appreciation course as a novice computer user, and warranted the assistance she sought and secured through Damon and me at that time. Then, as she continued through the semester, Amanda became more confident in her abilities and felt more comfortable using the computer technology required for the class. During the *Amanda Makes a Breakthrough* section above, Amanda proved her independence as an online learner by successfully submitting her artwork for Endeavor One.

However, here in *Vignette #2* Amanda's uncertainty with the use of the WebCT Homepage tool paralyzes her. She quickly exchanges her newfound independence for a self-deprecating reliance on others. During our final chat, Amanda tells me how she had asked for help from someone in the Student Learning Center. Her comments about their conversation and his accidental erasure of her second *Endeavor* reveal Amanda's foray along well-trod paths. Amanda's e-mail request for my personal assistance is proof that she had come full circle, in terms of her level of reliance on her teacher or a more capable peer.

I would have expected Amanda to demonstrate linear growth in her understanding of computer technology throughout the semester. Rather, she appears to have exhibited circular growth, which may be a far more realistic path of learning for a novice online learner. Amanda's distress also demonstrated that she had higher expectations for herself. Where, at the beginning of the semester, she turned to me first for help, she now turned to me for help after exhausting the support networks she had built. Once again, she was facing an impending deadline by which the Homepage was to be completed, and was again struggling to use a piece of computer technology with which she was not familiar. As the roadblocks increased, and the time grew

increasingly short, Amanda's e-mails reflected her rapidly deteriorating optimism. It was as if we had stepped back in time to the very first day of class when Amanda's inexperience with online learning and her uncertainty nearly defeated her; yet, she had tried to overcome these obstacles herself.

In both cases, timely assistance supported Amanda. She received help in two different ways. At the beginning of the semester, she received help in a face-to-face meeting; at the end of the semester, I provided help *entirely* online. Amanda and I set up a meeting time to discuss her difficulties in one of the WebCT chat rooms. During the chat, I tried to support Amanda both mentally and technically. I helped alleviate her concerns by assuring her that she would be able to accomplish the assignment, and by assuring her that she would receive credit for her work. Amanda also received technical assistance from me as I instructed her in the use of HTML commands for customizing her personal Homepage. The unique mixture of personally comforting dialogue and technically accurate instruction is what made my online chat with Amanda the perfect solution to her dilemma in this e-learning event. I offer an interpretation for Amanda's experience in this part of the creation of her webpage. We can examine each of the three axes of the Map of E-Learning to get a clearer picture of the factors at play in this e-learning event.

Amanda's Position on Axis A, Information Processing Functions: Knowledge Utilization

Amanda continually reminded me of her need to solve the problems she was having with the creation of her webpage. In most of her e-mails during the last week of the semester, she was adamant about her need for direct assistance using the WebCT Homepage tools. It was her conclusion that she could not figure out how to use these tools on her own with the limited information she possessed. Therefore, she solicited me to give her the additional information she

lacked. As I revealed, however, I was essentially learning how to use the WebCT Homepage as I directed her.

My knowledge of the way that HTML works in webpage design is the crucial portion of information that I brought to the e-learning experience. As I described the way that Amanda could use HTML tags to customize her webpage, she seemed excited about the concept. However, she expressed concern about the amount of time it would take to use the HTML tags to make her Homepage look as she wanted it to, particularly since she only had a day to complete the task.

Amanda became more receptive to the use of HTML commands for customizing her Homepage design when I began to offer practical systematic directions for fixing real problems she had identified in the way her webpage currently looked. Together, we solved the problems that Amanda was experiencing with this assignment. As the chat progressed, it became clear that Amanda was starting to grasp the way the concept of HTML applied to her work in a way that was much more concrete. She expressed a clear understanding of her newly acquired knowledge as she discussed the way she could order the headings on her Homepage. She also found a personally relevant way to utilize her newfound knowledge of the time saving cut and paste process in customizing her webpage.

Each of these developments in Amanda's understanding of information directly reflects the function by which she was processing that information. She was purposefully utilizing the information she received during our text chat to solve a specific problem that existed. In terms of Axis A of the Map of E-Learning, which describes the *information processing functions* realm of e-learning, Amanda's activity resides near the *conscious* end of the axis. This is true because she was actively processing the information in order to accomplish a specific goal. The point that

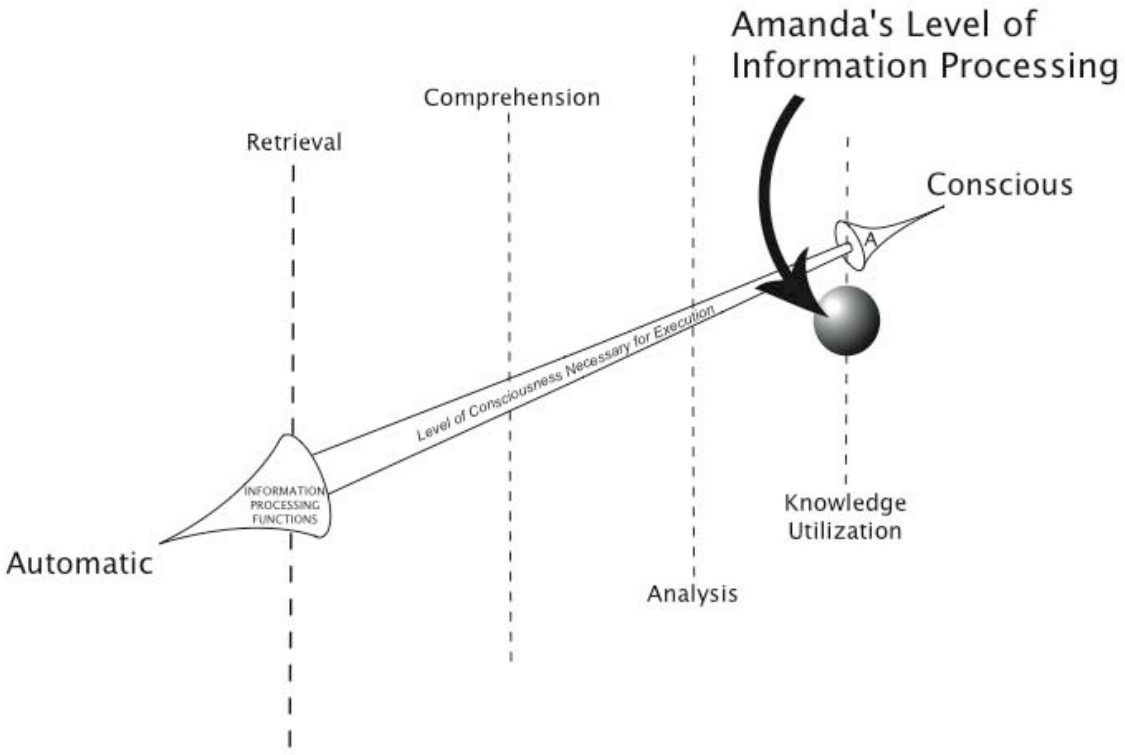

Fig. 6.8. Amanda's level of information processing.

represents Amanda's thought activity during this e-learning event, shown in Figure 6.8, aligns with the information processing function referred to as *knowledge utilization*.

Amanda's Position on Axis B, Practitioner Interaction: Experiential Learning

We can discern the level of Amanda's necessary interaction with others during this e-learning event by looking at Axis B of the Map of E-Learning, which is *practitioner interaction*. It is important to recognize that I was, as Amanda's teacher, the social other in this e-learning event. Amanda received individualized attention from me as I walked her through the process of customizing her Homepage. She responded to my prompts, first to look at the HTML Code Tutorial website, then, she followed my instruction as I led her through each of the steps required to insert an HTML tag into the WebCT Homepage tool.

What is most significant about Amanda's experience is the way that her level of thought and understanding progressed during the e-learning event. The development in her thinking was a result of her reflection on our dialogue. Because I had made an effort to establish a relationship with Amanda that had her success as its goal, she was able to follow me confidently into uncharted waters. She overcame her initial skepticism by placing trust in me as a significant social other. As our chat continued Amanda's confidence and understanding increased because of her growing familiarity with the concepts and techniques I explained to her.

Amanda was actively experiencing the procedures I was teaching her to use. She did not sit idle as I directed her through the WebCT Homepage customization. Rather, she conducted each operation I instructed her to make throughout the e-learning experience. With time, Amanda began to envision the way that she could use the tools at her disposal to customize her Homepage exactly as she wanted.

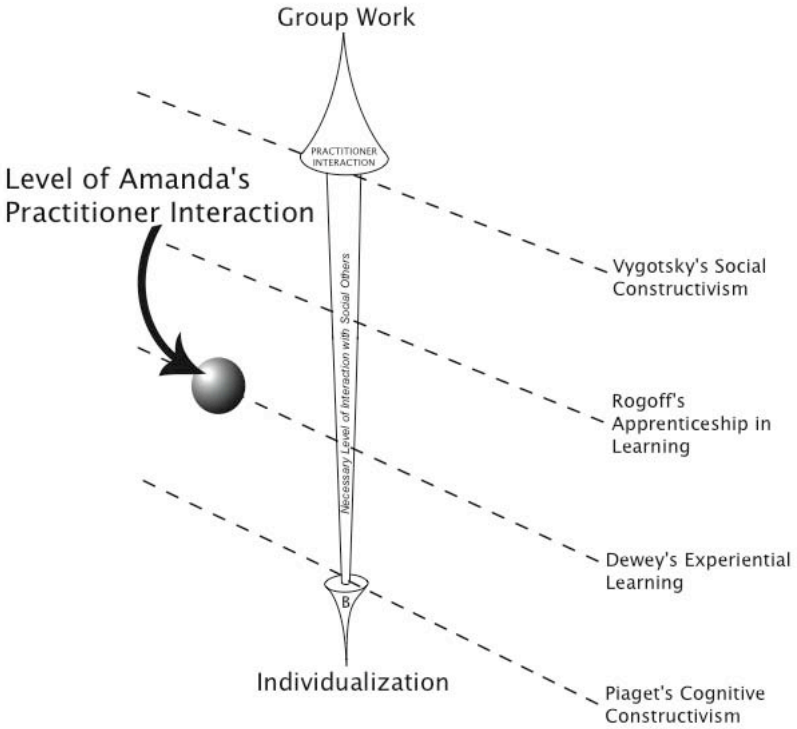

Fig. 6.9. Amanda's level of practitioner interaction.

Because of the necessity of my relationship with her, and because of the active experiential learning she conducted throughout the process, Amanda's level of practitioner interaction would most accurately be labeled as *Dewey's experiential learning*. On the Map of E-Learning, this level of practitioner interaction is near the *individualization* end of Axis B. The point shown in Figure 6.9 represents Amanda's position on this axis.

Amanda's Position on Axis C, Electronic Pedagogy: Teaching as Scaffolding

The third realm of e-learning, which is *electronic pedagogy,* is important to consider as we investigate Amanda's experience in this e-learning event. Electronic pedagogy, as described by Axis C of the Map of E-Learning, consists of four levels of teaching strategies that range from extremely student-centered approaches to those that are more teacher-centered. Each of these strategies makes certain educational outcomes possible.

I wanted Amanda to gain some practical experience with the tools of e-learning through our online tutoring session. My educational goal for her was that she would eventually be able to use these tools on her own. I used the *teaching as scaffolding* pedagogical strategy to accomplish this educational outcome. In this strategy, a teacher structures the learning activity in such a way as to move the learner toward a higher level of mental development. By providing information along the way, the teacher supports the learner's cognitive growth as the learner traverses the difficult distance between his or her present state of understanding and his or her potential level of understanding.

The needs of the student are the focus of the *teaching as scaffolding* strategy. However, the teacher's role is greater than it is in the *teaching as diagnosis* strategy, which is located at the absolute end of the axis (see Fig. 6.10). Instead, the teacher plays a crucial role in providing not

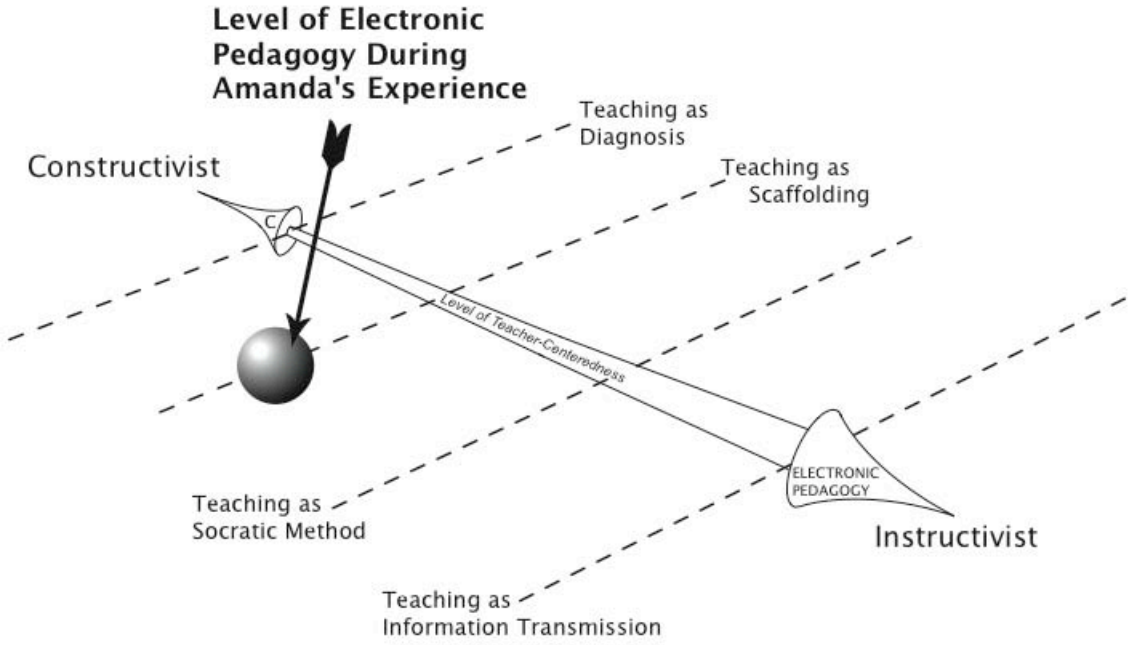

Fig. 6.10. The level of electronic pedagogy that I used as Amanda's online tutor.

only the goals and direction of the e-learning event, but the educational prompts necessary to move the student through the optimal mismatch presented in the learning encounter.

There is evidence that I used the teaching as scaffolding technique during the e-learning event; for example, when I responded to Amanda's aesthetic choices in the design of her Homepage. I did not prescribe the way she should make the webpage look, but instead allowed her to make her own decisions and then adjusted my teaching efforts in response. Additionally, I used a scaffolding approach to teaching when Amanda and I discussed the importance of having the headings of her webpage in a particular order. Essentially, when Amanda asked repeatedly about whether her "Welcome to Amanda's Homepage" heading could be placed at the top of her webpage, she was trying to achieve complicated results without first attending to the basics. She wanted to get the minor details set straight before she had all of the large components of the

Homepage in tact. As I replied to her repeated requests, I tried to emphasize that achieving the desired effects would take a lot of time. I did not ostensibly deny her the instruction she wanted; rather, I simply encouraged her to gain a "big picture" view of her work. To my delight, she did. I think her accomplishment is indicative of a maturing mind, which leads me to believe that Amanda made significant strides in her level of understanding through this e-learning event.

Plotting the Point of Amanda's Experience

Plotting the factors influencing the nature of Amanda's e-learning creates a visual representation of Amanda's experience. In Figure 6.11, there are three intersecting gray

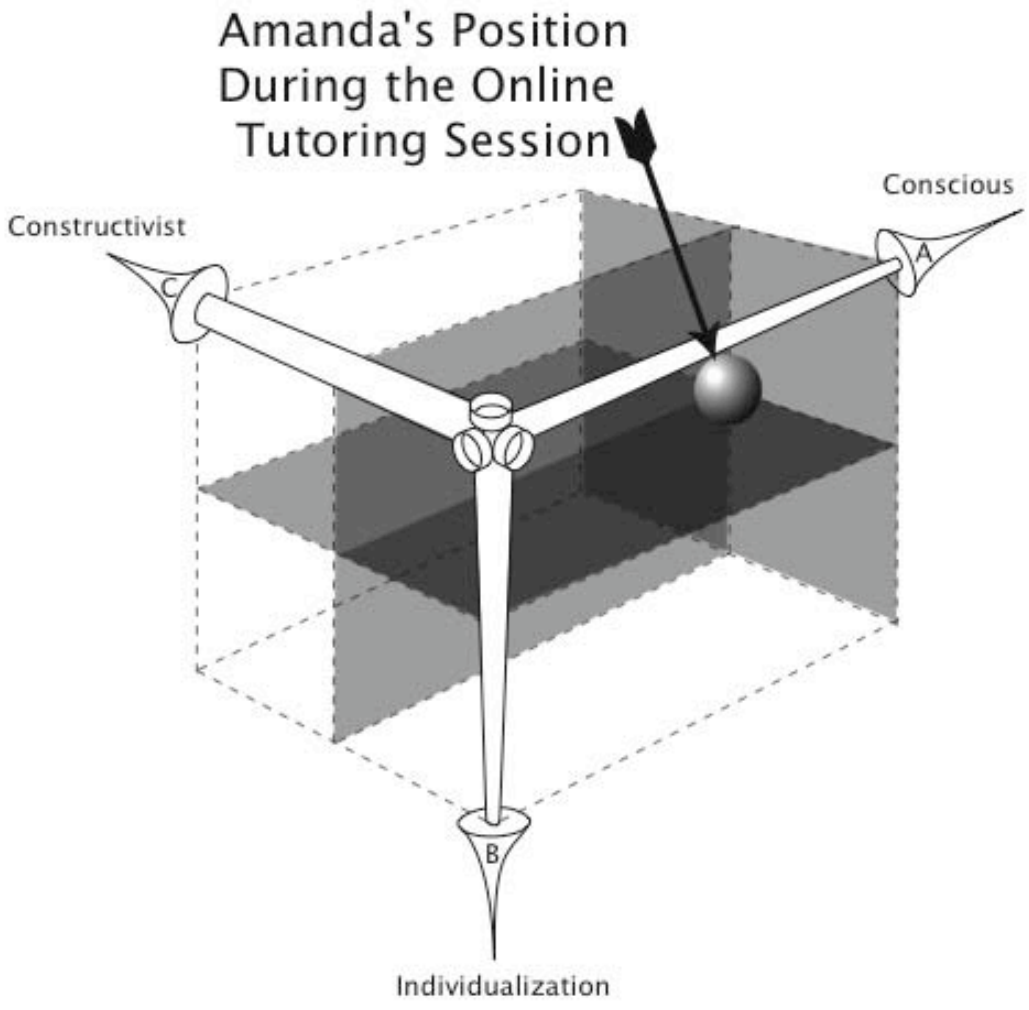

Fig. 6.11. The point that best represents Amanda's experience.

planes. Each plane represents the station along its corresponding axis identified as playing a role in Amanda's experience. For example, the gray plane positioned vertically at the rear of the Map of E-Learning corresponds with the *information processing function* of *knowledge utilization* described as being an accurate portrayal of Amanda's position on Axis A. The gray sphere plotted in Figure 6.11 sits at the place where these three planes meet. This point lies within the community of inquiry described by the Map of E-Learning.

An Assessment of Vignette #2

Throughout the period of time during which Amanda was actually building her webpage, the assistance of others was, apparently, something that she required. Unfortunately, an over-reliance on others can sometimes impair one's efforts. A prime example is the crisis Amanda faced when the Student Learning Center employee accidentally deleted Amanda's *Endeavor Two* image from her WebCT Homepage. This individual is not to blame for Amanda's desperate situation in the online class. She had crippled herself by losing the sense of self-confidence and independence she had gained in her work with *Endeavor One*.

Amanda is not solely responsible for her plight. A foundation had not been laid for her to build upon in her later work during the class. I did not take the time to show my students how to use the WebCT Homepage, nor did I provide any online tutorials to which they might refer. I assumed that the students would be able to figure out how to use it, instead of being proactive about providing them with some instruction.

Throughout the course of the study, other students also floundered while completing their webpage. Some students, like Jason and Damon, created an entirely different webpage to supplement their WebCT Homepage. Using a free website hosting service, they assisted each other in making an additional webpage to which their classmates could navigate when visiting

their WebCT Homepage. They just could not figure out how to make the WebCT Homepage work, as they wanted it to, so they came up with their own solution. Andy, another student, created an entire webpage by making an image file that contained the necessary images and accompanying text material. He used computer graphics software, such as Adobe Photoshop, to make this image file. Then, he uploaded that document as if it were an image by using the *Modify/Add banner image* tool of the WebCT Homepage area. He also added a couple of links to websites of personal interest at the bottom of his webpage (see Figure 6.12).

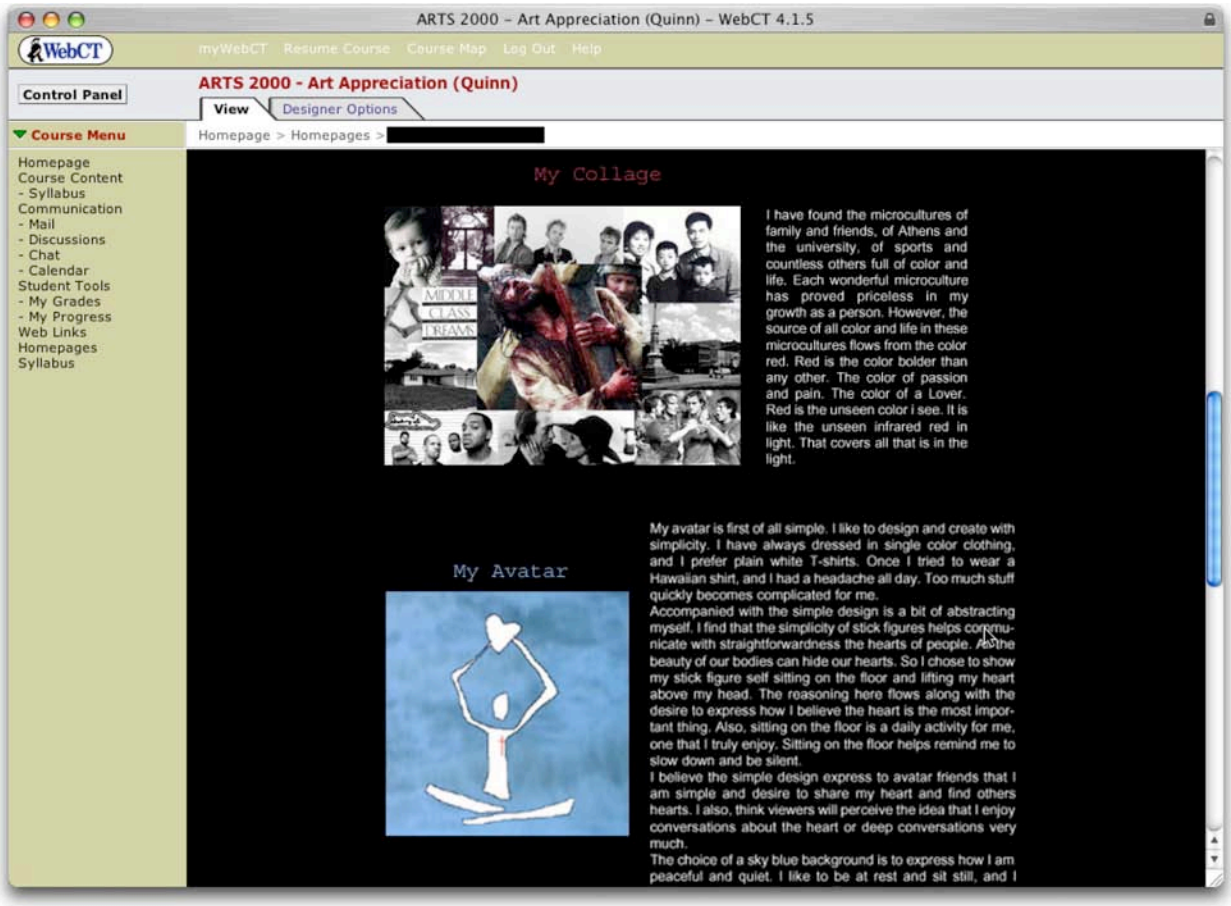

Fig. 6.12. Screenshot of one portion of Andy's Homepage image.

Where Jason, Damon, and Andy met my lack of instruction with their own resourcefulness, Amanda turned to me for help. The guidance provided to her should have been given to the entire class a month earlier. The manner in which I taught Amanda as we built her webpage is one that holds potential. By using the WebCT text chat, Amanda and I were able to troubleshoot her problems effectively. She received the guidance and direction that she needed while I performed the teaching that I had neglected for too long.

The most valuable aspect of the situation that developed is that we can see how it is possible to conduct effective tutoring sessions entirely online. Amanda and I worked together within the community of inquiry to overcome the obstacles. In educating her about the use of the WebCT Homepage, I learned about them as well. Our text chat was a fluid and responsive way for Amanda to process the instruction I was giving and reflect on how she could use it in her situation. Amanda effectively thought about the topics of our conversation because of the extra time she had to come to the mature and thoughtful conclusions that she did. The use of text chat provided this extra time. The only potential drawback is that the online tutorial was a rather time-consuming process to conduct in a one-on-one fashion. Perhaps a whole-group tutorial could be a less time intensive method of providing instruction for similar e-learning problems.

In conclusion, we see that Amanda seems to seek out an apprenticeship model as she tackles the problems she faces in e-learning. By coming to me in *Vignette #2*, she seemed to expect that I would be an expert in using the features of the WebCT Homepage. Rather, my skill level was really only slightly more advanced than hers, which qualified me as a more competent peer. Learning in relationship is a key aspect of Amanda's approach to e-learning. She required such a relationship with a more capable peer in every aspect of her work in building a webpage. Because of the use of interactive computer technology, I was able to provide her with the online

relationship that she needed. The flexibility of e-learning, and its ability to accommodate a learning environment like the one described in *Vignette #2* is an extremely important feature of online distance learning in the early twenty-first century.

Implications for Teaching

The major lesson I learned through Amanda's experience is that a solid foundation is *vitally* important to ensure success in e-learning. Amanda had very little experience with computers when she signed up to take my art appreciation class online. The one and only face-to-face meeting I had with the online students on the first day of class was far too superficial and cursory an overview of the use of computer technology to be of any benefit to a student like Amanda. While my on-campus meeting with Amanda on the second day of the semester was beneficial to her, Amanda continually felt overwhelmed and under prepared for the tasks she was asked to perform in the class. She asked for help from anyone and everyone as the semester progressed. There were several points in time when Amanda really seemed to rise above her situation to find success in her own knowledge and ability. Then, as the cycle continued, Amanda turned to me for help once again.

It is not the sole responsibility of an online instructor to shore up a student's level of proficiency, readiness for online learning, and technical knowledge before the e-learning experience can begin. Some universities[7] that offer distance learning courses encourage prospective students to take a short self-assessment to help them determine if e-learning is right for them. However, it is still important to assess a student's level of technical expertise at the beginning of the course. In what would essentially be a pre-test, students could complete basic

[7] DeAnza College has such a resource on their website. The short self-assessment is called "Are Distance Learning Courses for You?" and is available on the World Wide Web at http://distance.deanza.fhda.edu/DLCQuestionnaire.shtml.

exercises in using the pieces of computer technology that they will be using throughout the course of the semester. The results of such an examination would provide a teacher with valuable insights about the type of learners in the class. One could offer rudimentary instruction in the basics, as necessary.

In a quality online learning experience, the technology used in the class should become transparent so that the learning process can become the primary focus. Palloff and Pratt (1999) emphasize this goal. "Once again, the technology should only be used as a vehicle to convey the ability to create a collaborative, transformative process. It is only the means by which instructors and students can connect to form community" (p. 167). Amanda's experience demonstrates the fact that the technology used in our art appreciation class had remained opaque. It continued to be a problem and a source of unease. Rather than paving the way to a meaningful learning experience in this particular e-learning event, the technology used in my art appreciation class became an impasse.

CHAPTER SEVEN

Conclusions, Implications, and Future Research

At times, one can only get a clear sense of where s/he is going by looking at the distance s/he has traveled thus far. It is with an eye towards my journey through post-secondary art appreciation pedagogy that I conclude this dissertation. This study is an attempt to illuminate one of the ways I am grappling with my developing approach to teaching art and artmaking to collegiate non-art majors. By teaching a small group of my undergraduate art appreciation students entirely through the use of online distance learning *at the same time* that I was teaching their face-to-face counterparts, I placed myself in a position to encounter two seemingly disparate educational environments. These two worlds were combined for six synchronous class sessions throughout the month-long summer class, which created a hybrid art appreciation experience.

The resulting hybrid class was unlike anything I had ever known in my educational life. In my time as an undergraduate, I had taken many traditional courses in art, art education, and art history. As an adjunct faculty member, I had taught several sections of art appreciation in recent years. I had only participated in one asynchronously delivered online distance learning class during my graduate coursework. Hence, I was looking at the online teaching I did in the hybrid class through the lens of a traditional, face-to-face instructor. I believed that my role was to dispense knowledge about art, artists, and art movements throughout history. My primary mode of instruction was by lecturing, during which times I endlessly rattled off artists' names, dates, and titles of what the artworld considered to be important monuments of art.

After one of these lectures in the summer of 2003, an observer approached me with feedback about my pedagogical strategy. She complimented me on my command of the information I had been telling my students about the artwork of the interwar period. However, it was her astute insight into the dynamics of the classroom that changed the way I thought about art appreciation forever. She reminded me that it was important for me to get students to talk about the art we were discussing in class. After all, she said, "It is a *discussion*." Her comment was a truth that I had known, internally, for a long time. Yet, I had never let my internal knowledge of the importance of social and collaborative meaning making affect the way that I conducted my art appreciation classes.

It is in that same spirit of introspection and soul-searching that I conducted this study in online learning through the hybrid classroom. This study's primary research question is: What do educational events (classroom lectures, small group work, student discourse, art making, and teacher-student discourse) look like when post-secondary art appreciation is taught online? By offering some answers to this question, I disclose some of the key factors that contributed to the teaching and learning environment in the art appreciation experience.

The Nature of E-Learning Events

The messiness of e-learning events.

The e-learning events in this art appreciation course were messy. This was partially a result of the ill-structuredness of art, in general (Efland, 2002). Additionally, hypertext was the basis for much of the delivery of the course, as it was Web-based. Hypertext is considered by Carpenter & Taylor (2003) to have a complex and messy nature, as it is oftentimes an approach to knowledge that scatters and clutters portions of information across the broad expanse of the

World Wide Web. Furthermore, the messiness of e-learning events in this art appreciation class can be contributed to the ambiguity of the online learning environments created in this study.

Chaos seems to have been an inherent feature of many of the e-learning events in this study. However, the disorder of these experiences is not a negative type of chaos; rather, it is an untidiness that prompts the students to order and arrange their learning activity in a meaningful way. Additionally, the teacher of such chaotic experiences provides resources and expertise by assisting students to rally around one another as they grapple with educational issues. In that sense, e-learning events are marked by "good" chaos. I echo Carpenter and Taylor's (2003) belief that "studying and learning about art and artmaking should echo this ill-structured, complex, and ambiguous process" (p. 51). To ensure that the chaotic environment is one of promise, the instructor of an online art appreciation course must remain attentive to the many facets of e-learning events, being mindful of the students who are involved in those educational situations.

E-learning's multifaceted nature.

E-learning events are also multifaceted. As one gains a sense of the nature of one aspect of an e-learning experience, another trait is seen. In the same way that a jewel's many facets are seen from any one perspective, an e-learning event manifests several features at the same time. Each of these aspects of an e-learning experience reflects a unique characteristic of online distance learning to create a multifaceted understanding of what it is like to teach and learn online. For example, as one investigates a facet of an online group chat, it becomes apparent that this kind of e-learning event is primarily a social event. Inevitably, however, oblique views of the adjacent facets reveal that the same online chat experience is overwhelming, slow, reflective, and

Fig. 7.1. Multifaceted nature of e-learning events, as represented by a jewel.

intellectually productive. Figure 7.1 is a visual representation of this multifaceted nature of e-learning events, as determined by the three dimensions of e-learning. These three dimensions are *information processing functions*, *practitioner interaction*, *and electronic pedagogy* (see Fig. 2.1). The two poles of each of these dimensions of e-learning determine the ways that the many aspects of an e-learning experience are seen, in conjunction with its most salient feature.

E-learning events are mercurial.

E-learning events are also mercurial. They can quickly change in nature, often in a volatile manner. There can be unexpected results when e-learning activities involve the dynamic interplay of teacher, student, and interactive computer technologies. Students can shift roles from

moment to moment as they navigate online learning tasks. The community of inquiry enacts unanticipated shifts as it responds to technological problems, evolving social situations, and the storehouse of information available on the World Wide Web. Outcomes from these changes can be overwhelmingly positive as the online teacher tailors e-learning events to the emerging intellectual and social needs of the students.

In this chapter I discuss six thematic conclusions that emerged from this study, which illuminate the messy, mercurial, and multifaceted nature of the e-learning events conducted in the art appreciation class. These six themes are: *The Necessity of a More Capable Peer, The Temporal Shift in E-Learning, E-Learning's Student-Centered Tendency, "The Liquidity Effect" in E-Learning, Student Disposition and Its Role in E-Learning,* and *The Importance of Multitasking in E-Learning.* Each of these themes pertains only to the e-learning events of this study, as they were conducted via interactive computer technologies in a hybrid classroom. It is important to recognize that some e-learning events, particularly those created within an "anytime, anyplace" framework, will not adhere to the principles contained in these conclusions. Specific examples from the cases presented in Chapters Four through Six are offered as supporting evidence for the thematic conclusions. Each of the thematic conclusions is followed by recommendations that should be considered when teaching art appreciation via hybrid e-learning means. Attention to these suggestions for online distance learning approaches to art appreciation is crucial to ensure success in creating and delivering such a course.

The Impact of E-Learning on Traditional Teaching

The secondary research question of this study is: What is the impact of the use of e-learning upon my art appreciation teaching practice? In answer to this question, I extend the

thematic conclusions into the realm of art appreciation education for the more traditional classroom. E-learning impacts traditional teaching practice in several ways. First, it reminds us of the messiness of learning. The traditional compartmentalization of knowledge is a superficial and counterproductive manner of teaching and learning. Rather, an educational enterprise in art appreciation would do well if it is presented in ways that blurs disciplines, marries teaching strategies, and offers multiple, competing scenarios for student learning. In that way, "good" chaotic situations can be established, which might spurn students on to solve problems and organize resources as they utilize creative thought while under the constructive supervision of a mindful pedagogue. An example is an adaptation of "mock trial" learning scenarios in the humanities, particularly as applied by forensic debate. In the art appreciation classroom, real-world and hypothetical cases of aesthetic inquiry in the visual arts (see Battin, Fisher, Moore & Silvers, 1989) can be considered by teams of students. Pairs of teams (one arguing for a particular aesthetic outcome or issue, and the other against) can research background information, organize points of debate, and present their findings before their peers, who essentially serve as the jury in what can be fun and intellectually challenging educational experiences. As the teacher, I have had the privilege of serving as the judge and "presiding" over several such mock trials in my art appreciation classroom.

Second, e-learning provides insight into the plethora of outcomes that are possible in teaching. No two students will experience an educational event in the same way. Instead, each learner brings his or her own set of lens to view lecture material, readings, discussions, etc., that determine what is gleaned from each lesson. Educators in the traditional art appreciation classroom might adjust educational objectives accordingly, in order to accommodate the wide variety of student responses. For example, in my art appreciation classroom I might utilize the

disparate levels of understanding my students hold about issues of visual art by requiring them to facilitate the discussion of topics of art-related and personal interest within a class setting. One way to accomplish such an educational objective is by enabling student teams to select readings that focus on selected topics and pose thought provoking questions based on those readings. Class members are presented with their assignment by the facilitators at the conclusion of a class, with the understanding that responses of some kind will be due upon the next class meeting. The instructor formulates a supplementary lecture or class activity to explore during the remainder of that following class meeting. Specific requirements can be tailored to each class's needs, as the teacher sees fit. This approach to curriculum is a highly emancipatory process that at once democratizes the classroom and provides the opportunity for multiple student understandings to be visible and explicit.

Finally, e-learning events teach us of the importance of flexibility and responsiveness in traditional art appreciation. A good teacher knows how to "read" the students for signs that they understand what is being discussed and are engaged in learning. Education at the post-secondary level in an art appreciation class must adopt a similar approach in the interest of moving students forward, intellectually speaking, in a harmonious fashion. For example, a teacher might use "checks for understanding" during a class session or throughout a series of course activities and investigations. These checks may involve pop quizzes, small group (in a large lecture hall class) reports of progress, or more rudimentary means of gleaning insight into the ways students are processing information. If flexibility is to hold a place of prominence in teaching, teachers must hone their perception of minute shifts in students' attentiveness and interaction with the class, their peers, and their work. Instructors must continually diagnose potential problems in rapidly altering states of the classroom environment in order to avoid disorienting and volatile changes.

In discussing these implications for traditional art appreciation curriculum and pedagogy, I examine how my experience as an online teacher has informed my teaching in the face-to-face art appreciation classroom. In considering the impact of e-learning upon my traditional art appreciation pedagogy, it is important that I acknowledge the difficulty of teaching a hybrid course. Therefore, each implication is followed by recommendations for teaching practice, in terms of the six thematic conclusions that emerged during this study.

Emerging Thematic Conclusions and Implications

The Necessity of a More Capable Peer

In several cases, student learning was contingent upon the guidance of a more capable peer. In Chapter Four, Catherine faced an obstacle to her learning when she was unable to hear my voice during the Horizon Wimba session. After she struggled with the technology for several minutes, she looked to someone else for assistance. Catherine knew that I was preoccupied with my teaching duties, so, she utilized the help of a more capable peer. She received assistance from Steve, the individual from the University's Computer Support Services, who was online and available to help her and the other students.

Later in her e-learning experience, Catherine took on the role of the more capable peer. She had been in an online class when she was in high school, so she was poised to provide guidance to her classmates. She had several opportunities to do so during the online lecture. When I charged the online students to chat about their art objects, Amanda had asked a question regarding the assignment. She would not be able to proceed unless someone provided her with some direction. As I was, again, consumed with my teaching duties, Catherine provided Amanda with the help she required. In another instance, Theresa was experiencing difficulty with an

aspect of the class assignment because she could not understand how to look at the art objects and keep up with the group chat. Catherine intervened with specific instructions that gave Theresa access to full participation in the e-learning event.

In Chapter Six we saw that a more capable peer was essential to Amanda's success in a component of the online class. As she began to tackle the problems she faced, she sought the help of a classmate who could help her. Damon is the young man who assisted her in the creation of her first work of digital art. She accomplished a great deal academically and personally because a more capable peer was available to her.

The presence of a more capable peer is important in an e-learning event. Sometimes, the more capable peer can help troubleshoot technological difficulties in the class. As the teacher is often overwhelmed with the many concerns of the teaching and learning experience, students must look to one another for guidance and direction. Certainly, the health of the online community of inquiry requires such a collaborative focus. The facilitation of a more capable peer in solving technological issues accelerates collaboration.

A more capable peer should also be available to help shape the e-learning event. When there were times of confusion in the art appreciation class, certain students took a lead in molding their classmates' activity. For example, in Chapter Five, my instructions regarding the small group chat were quite ambiguous. In the chaos that ensued, Tricia provided some organizational structure with her text chat comments. Her experience as a leader in the many social organizations she belonged to made her an excellent event coordinator in the online realm. She took the initiative to suggest that each small group meet in the chat room that corresponded with their group number after taking five minutes to read the discussion topic. The others agreed.

The sense of uncertainty that plagued the beginning moments of the e-learning event had dissipated because of the guidance of a more capable peer.

Teaching Recommendations

This theme speaks to the importance of framing learning opportunities within the context of students' social environment. Specifically, we see that it is vital to ensure that students have the means to achieve a deeper level of understanding with the assistance of a more capable peer. Typically, students are not encouraged to make collaborative meaning in visual art during their art appreciation classes. Rather, students receive and regurgitate information in tests that drill them on artist names, titles, and dates of what experts consider "landmark" or "monuments" of visual art (Kundu & Bain, 2006). Study of this kind propagates a modernist notion of art criticism—that multiple viewers can arrive at similar understandings of works of art if they will respond only to the visual information presented in the work (Barrett, 1997).

I presented a much different approach to art appreciation in Chapter Five. In the experience of Sarah and Andy during their online chat, we see the richness of collaborative meaning making generated through their cooperative navigation of the aesthetic issues under discussion. Each of them acted, at different times, as the more capable peer in an *apprenticeship in thinking* (Rogoff, 1990). They pulled each other through the e-learning event, prodding one another to a higher level of understanding than they could have reached alone.

The presence of a more capable peer in art appreciation also appears to be important as students construct knowledge in more fundamental matters. In many of the e-learning events in this study, a more capable peer was available to assist students in the basics of using computer technology, digital art making, and participating in classroom learning events. Likewise, the

identification and utilization of more capable peers holds potential for pedagogy in the traditional art appreciation classroom.

For example, after a teacher introduces a difficult concept, students who "get it" might be available to help students who do not. Identification of these more capable peers is possible through simple spontaneous written questionnaires or brief pop quizzes that teaching assistants score to provide the instructor with immediate feedback. Based on the results, break out discussion groups could be set up so that each one included a more capable peer who could provide guidance for his or her classmates. Similarly, when discussing art making techniques, a teacher might call upon peers who are more capable. For example, students who have had experience in making linoleum prints during their K-12 education could provide helpful insights for their classmates who are grappling with an understanding of relief printmaking processes. Teachers could identify such individuals with a pre-test or a questionnaire.

In the community of inquiry model of e-learning, the teacher is also a more capable peer at times. In that sense, an online instructor must constantly be training in the use of interactive computer technologies for the virtual art appreciation classroom. Instructional technology is constantly changing, as the development of new and emerging computer technologies expands exponentially, according to Moore's Law, which accounts for the way that data density doubles approximately every 18 months (Webopedia, n.d.). Even when a teacher maintains a close watch on emerging technologies, it is highly likely that s/he will occasionally be forced to learn certain techniques and applications along with the students. Sometimes, this problem may be so pronounced that an instructor will not have adequate information and skills to help a student like Amanda from Chapter Six, who struggled with her webpage creation. To alleviate such a problem, it is important to provide students with access to individuals that might be considered

experts in these technologies through programs like the ANNIE system mentioned in Chapter Two (see Dempster, 2003).

The Temporal Shift in E-Learning

E-learning events appear to change the way that time affects the teaching and learning environment. Palloff and Pratt (1999) suggest a number of ways that time affects learning and teaching through online means: increased time is required for the teacher, excessive time online can lead to addiction to being online or information addiction, time management becomes crucial, and time constraints alter the way that institutional practices such as office hours are conducted. I must elaborate on the temporal shift that occurs in online learning, and its impact on student experience.

First, it is important to note that more time is required to conduct synchronous discussions in the virtual classroom than in the face-to-face classroom. This is partially due to the manner in which the use of text for class discussions draws out conversation. Typing simply takes more time than speaking. At the close of Chapter Five, for example, I described the end of class shuffle and its impact on our class discussion. Even though we had a half-an-hour to complete this period of closure, I still ran out of time.

In Chapter Six, we saw another example of the way that the text chat elongates time during a real-time discussion. The conversation I had with Amanda during the online tutoring session extended the time necessary to complete our straightforward conversation. I was shocked that night when I discovered that we had been chatting for an hour and fifteen minutes. As a point of contrast, when Amanda and I met on campus at the beginning of the semester, I guided

her through three different technical procedures in nearly two-thirds the amount of time it took to guide her through one simple procedure in the online tutoring session.

Even though time quickly slips by in synchronous online discussion, there is an important benefit to this approach to teaching and learning. This positive result provides a second and interrelated point to consider about the temporal shift that occurs in e-learning. Students have a greater amount of time to process information and reflect on what they are learning when they are engaged in an online text chat. I do not think the increase in discussion time is a guarantee of deeper student reflection; however, it does increase the potential for meaningful reflective learning.

An example is helpful here. In my online tutoring session with Amanda, it seemed that she was making remarkable progress in her thought processes. She advanced, in part, because of the way that she reflected on the information that I shared with her. In several of her text comments, she revealed a sophisticated grasp of the HTML concepts I was attempting to teach her. She also demonstrated an understanding of the way she needed to attend to the "big picture" of her Homepage's design, in exchange for her initial obsession with the smaller details. I am convinced that the reflective activity that occurred in Amanda's experience was the result, largely, of the way that time "slows down" during the use of synchronous text chat. Asynchronous modes of online communication, too, can promote greater student reflection in e-learning. E-mail correspondence and bulletin board discussion postings, in particular, require students to slow down and think about what they are reading and writing.

Teaching Recommendations

This temporal shift in e-learning has important implications for the design of art appreciation curriculum. First, there must be a slower pace in art appreciation curriculum.

Students appear to learn in ways that require more time to process the information they receive than is typically allowed in a survey course such as art appreciation. Their search for understanding often mandates the need for an intellectual journey. Such an investigation takes time. Teachers should allow, even encourage, students to take the time necessary to delve into issues of art appreciation. In a course typically used to cover as broad a range of visual art content as possible, slowing the pace of curriculum is difficult. It is challenging for instructors of art appreciation to cover art making techniques and terminology, elements of form and principles of design, art historical content, and aesthetic and critical issues of many kinds.

A more slowly paced curriculum may necessitate a pruning of the overgrown content that stifles art appreciation teachers. The result of this pruning would resemble a curricular approach to art appreciation that is similar to the goal of *uncoverage* promoted by McTighe and Wiggins (1999). By uncoverage, the authors mean the opposite of the quick and superficial survey of material that many curricula promote. Uncoverage encourages teachers to include fewer topics in their instruction, providing the means by which students can achieve a higher quality of understanding. This higher level of student learning is a result of the increased time students have to conduct deeper investigations of curricular content.

Reflective activity is a second curricular issue to consider regarding the way time affects student learning. The quality of student reflection is determined by the amount of time students have to think about the content they are learning. Because of the way that e-learning events force students to slow down and reflect on what they are reading, seeing, hearing, and experiencing, reflective thought is encouraged. Students can read and reread the material they are investigating, particularly when using asynchronous modes of communication, which contributes to more

structured and well thought out responses (Quitadamo, Brown, & Educational Resources Information Center (U.S.), 2001).

To promote reflection, students should also have opportunities to reexamine previously taught material in new ways. This curricular technique would also require an altered sense of timing in art appreciation education. Teachers might introduce curricular concepts to students at a basic level; then, the class may revisit those concepts at a more sophisticated level or from a different perspective. Each additional visitation of the content could allow to students to form more complicated and intricate understandings of the material as they consider their previous knowledge in terms of the new information they encounter.

This approach to curriculum is similar to the approach advocated by Jerome Bruner (1960). Bruner referred to the way that such an approach to curriculum would cycle through content in an increasingly more sophisticated manner as *spiral curriculum*. Subsequent lessons would build upon the concepts introduced previously as students modify the knowledge structures they have in place to accommodate their newfound understanding of that knowledge. Reflective activity, and the time needed to do it, must be an important component of such an approach to art appreciation curriculum.

Additionally, because of the temporal shift in e-learning, it is important to consider the implications for course structure and timing. As mentioned at the conclusion of Chapter Five, I believe the online chat revealed the necessity for a longer period of closure in a synchronous class session. Additionally, the community of inquiry can often take a longer amount of time to develop a satisfactory level of practitioner interaction, altering the potential development of cognitive presence (Garrison & Anderson, 2003). In order to alleviate this problem, an online course should be taught on an alternative course calendar that provides a longer amount of time

than is currently available in the quarter or semester calendar common in most institutions of higher education. In this study, the four-week course was entirely too short to enable the community of inquiry to flourish. Even though there were moments when students began to act effectively as virtual teams or as co-constructors of knowledge, a collaborative mindset did not pervade the online art appreciation group.

E-Learning's Student-Centered Tendency

Another thematic conclusion we can draw concerns the student-centered tendencies that reigned in many of the e-learning events of this study. E-learning is purported to effect a change toward teaching that focuses on the *learner*, rather than the teacher. Garrison and Anderson (2003) refer to such an online learning focus as the *new learning paradigm*. In their estimation, e-learning has the power to effect a paradigm shift in the entire enterprise of education. Gibbons (2004) sees the paradigm shifting toward *self-directed learning*, which he claims is fostered by the use of computer technologies and the Internet.

I embrace the notion that learning is the focus of teaching, meaning that the focus of teaching is the student. However, I believe that e-learning holds the potential to make a vast range of pedagogical practices possible, even those that are more teacher-centered such as the lecture. The conceptual framework of this study reflects that belief. In it, the third realm of e-learning, *electronic pedagogy*, reflects those diverse teaching strategies.

Nonetheless, a student-centeredness seemed to pervade many of the e-learning events in my classroom, even those that were a result of what are traditionally teacher-centered approaches. To put it another way, even when I *tried* to dominate the electronic classroom, the students became the real focus. It is remarkable to have seen this theme emerge from the

students' experiences. For example, in Chapter Four, we followed Ellie through one of my online lectures. As Ellie text chatted with her peers about Albrecht Durer's *Knight, Death, and the Devil*, she engaged in a second-level narrative about the identity one of its figures. Her short conversation with Amanda, Rita, and Tara proved to be a point in the lecture when my *information transmission* teaching strategy was subjugated by a much more student-centered pedagogical technique.

To be more specific about the pedagogical shift that occurred in this e-learning event, it is important to note that I did not actually address the errant text chat. As I continued speaking, my pedagogical strategy appeared to be more similar to a *laissez-faire* approach. Such an approach to teaching would be located beyond the *constructivist* end of Axis C at an extremely student-centered position. As such, it was a teaching strategy outside of the realm of the community of inquiry. Ellie and her peers might have carried on their misguided inferential meaning making session longer, but Travis rightfully admonished them to set them back on the right path. He essentially became the teaching representative for the community of inquiry in this instance.

Herein lies the most poignant illustration of the tendency of this approach to e-learning to effect a pedagogical shift toward student-centeredness. Because e-learning experiences of this kind occur within the community of inquiry, it is difficult for a teacher to take an authoritative stance. I attribute this phenomenon to the use of interactive computer technologies. These technologies afford learners with the means to present multiple points of view while allowing them to develop knowledge and meaning as a society of inquiry.

Teaching Recommendations

We have seen that, in this study, student learning tended to dominate what the teacher wanted to accomplish. Because of the way that the Horizon Wimba sessions, for example,

incorporated a method for student discourse about the lecture as it occurred, students often expressed their inconclusiveness or misunderstandings about the topics we discussed. Immediately addressing these misunderstandings is one of the jobs of others, students and teacher, in the community of inquiry.

The student-centeredness of e-learning also reminds us how important it is to be aware of student understanding at all times. A teacher can make instructional adjustments in teaching based on an accurate formative assessment of the students' current level of understanding. These formative assessments of student learning can be informal through verbal checks for understanding or can be conducted through more formal methods, such as pop quizzes or polls. Such adjustments are extremely important since students' misconceptions might inhibit them from accurately grasping future concepts.

Additionally, it is important that student-centered pedagogies be woven with teacher-centered ones in order to enact a variety of e-learning events. An online art appreciation class is most vibrant when students are provided with diverse and varied learning experiences. As seen in Figure 7.2, the e-learning events described in this study are plotted together on the Map of E-Learning in order to provide a picture of the breadth of learning experiences. The points that are blurry in Figure 7.2 are those that represent e-learning events outside of the community of inquiry. The remaining six points demonstrate that the e-learning events they represent varied widely. These diverse outcomes are the result, primarily, of the different pedagogical stances that I assumed in the study. By utilizing both instructivist and constructivist approaches, I was able to create several different avenues for student learning in the online art appreciation class.

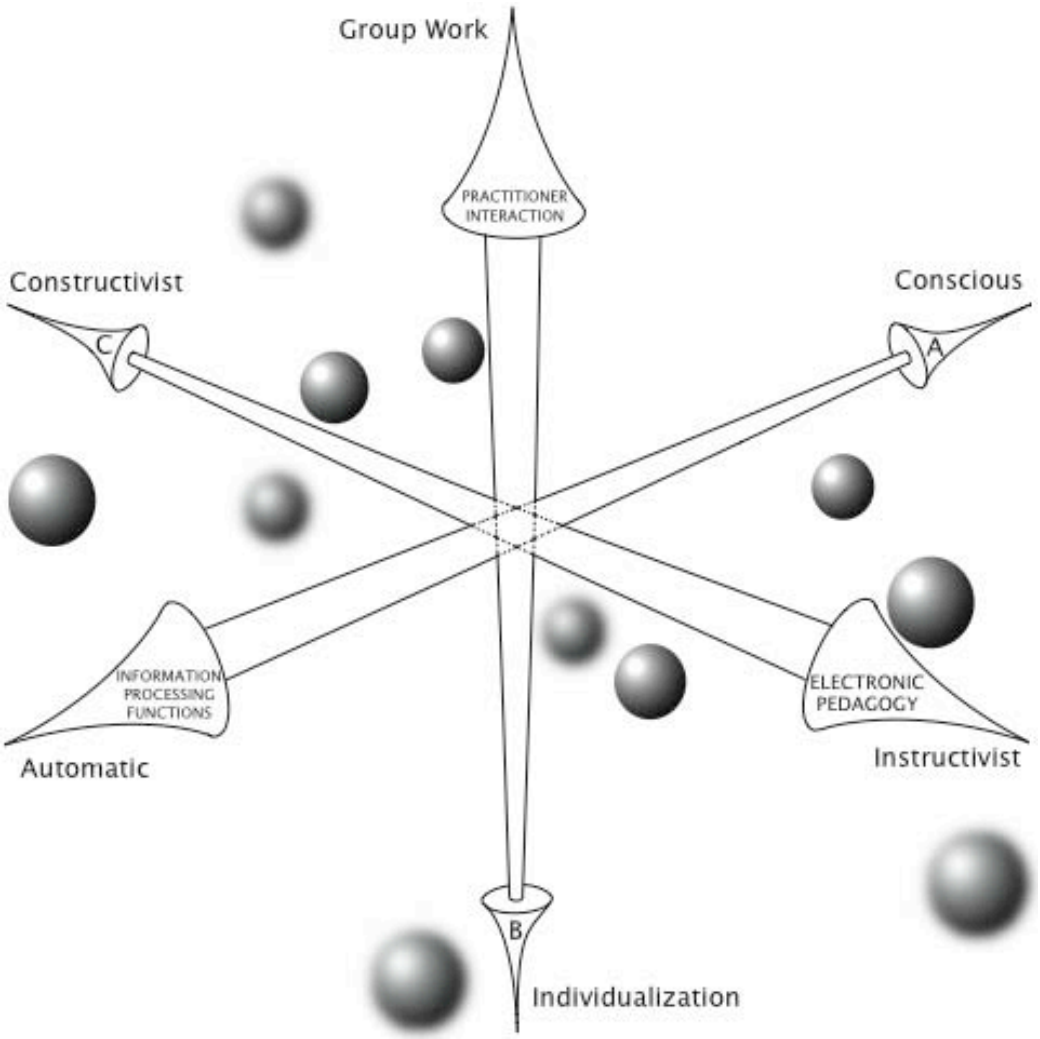

Fig. 7.2. The plotted points of all of the e-learning events of this study.

"The Liquidity Effect" in E-Learning

E-learning events tend to heighten a student's latent and less salient qualities. Sometimes students who display certain personality qualities in face-to-face encounters possess wholly opposite characteristics in the online realm. Palloff and Pratt (2001) attribute this unique facet of e-learning to the text-based medium of much of e-learning's practitioner interaction. For example, in their research they have found that students who are typically introverts become quite extroverted in their online interaction with others. These unleashed personality traits can

affect a student's experience in the online classroom, as well as the experiences of others. What results is a classroom environment that often fosters unanticipated student responses to course assignments. These varied and uncontrollable responses are just another indication of how little authority the teacher can maintain in e-learning.

I liken this aspect of e-learning to the peculiar effects that some natural materials possess in what I call "the liquidity effect." What this scientifically-oriented metaphor refers to is the way that the physical characteristics of certain objects defy their actual properties. An example is in order here. Think about mercury. This periodic element is a solid in its naturally appearing state. However, it acts like a liquid by taking the shape of whatever contains it as it freely flows from one place to another. Mercury appears to be something it is not.

Perhaps the properties of sand provide a better example of the liquidity effect. While a grain of sand looks and acts like the solid that it is, something unique happens with multiple grains of sand. Many children have marveled at this phenomenon. As one grasps a handful of sand, it flows in and around any object in its path. The tiny grains slip in between fingers and out of the hand as if sand was a liquid. Again, the collection of solid pieces of sand appears as a gestalt to be a fluid.

The dynamics of a truly collaborative e-learning event alter the teaching and learning environment. This is true because the societal concerns of an online community replace an e-learner's sense of independence. The virtual class, as a collective of "individuals-in-their-relations" (Dewey & Childs, 1981, p. 80) exhibits properties that are difficult to grasp at any one moment in time, as the online environment shifts to accommodate diverse activities. The liquidity effect seeks to account for the mercurial nature of the e-learning events I described in this study.

In Chapter Five, I introduced two groups and their disparate experiences in the online chat. From what had been a chaotic beginning to the class assignment, Sarah and Andy forged a successful partnership as they engaged in meaningful discussion. Chul, Rita, and Jason, on the other hand, could not effectively conduct their work because they failed to connect in the online chat. While we could discuss many aspects of these contrary outcomes, I want to focus on how it was possible that the two groups achieved such distinct results. I believe the liquidity effect is primarily responsible.

All five of these students had been excellent participants in the online art appreciation class. Each of them had exemplary "attendance" and was an active and thoughtful contributor to the online discussion board. Of these five, Rita is the only student who I would consider a novice computer user. Even her lack of expertise in computer use did not inhibit her participation in the online lectures and chats during the first three weeks of the month-long semester. The others were also vigorous participants in the online lectures and chats. As such, all five of these students were well versed in the procedure for conducting an online chat in the class. We had carried on two similar synchronous chats before the events of that day. All of the students were prepared, both technologically and procedurally, to have success in the online chat.

When I presented these similarly prepared students with the same e-learning opportunity, something happened to impair one group's work. Chul, Jason, and Rita, as a group, could not achieve the same level of success in the group chat that each of them had individually experienced to that point in the class. Because of the shifting roles the students had to play in online group work, these students were unable to cope with the dynamic responsibilities presumed upon them by the forming of a collaborative partnership. Perhaps trust, which is cited as the key issue in collaborative virtual teams (Paul & McDaniel Jr., 2004), had not been

adequately established. Additional problems associated with virtual teams, such as lack of shared background knowledge, coordination problems, lack of familiarity with online behavior and interaction, and the absence of face-to-face encounters (Huysman et al., 2003), might have rendered the group defunct Like liquid, this online community proved to succumb to the challenge of the e-learning event, and had taken the path of least resistance, which brought with it the demise of any potential success they might have claimed in the online chat.

Teaching Recommendations

Since the collaborative spirit of the community of inquiry can be so volatile, it is important that collaboration is carefully established in an e-learning course. In Chapter Five, I enumerate the phases of collaboration according to Palloff & Pratt (2005). These five phases are: set the stage, create the environment, model the process, guide the process, and evaluate the process. By attending to each of these essential aspects of the collaborative process, a teacher helps reinforce the community of inquiry concept. Students are reminded about the importance of collaborating for the co-construction of knowledge and team-based problem solving, which are both crucial aspects of an online art appreciation course following the model I have described in this study.

Additionally, if an online pedagogue will maintain a close watch on students' responses to assignments and material discussed in the course, it might be possible to intervene in potentially slippery e-learning situations. An online educator can do so by remaining in close contact with the students by logging onto the course website at least once a day to monitor and contribute, when necessary, to student discourse. Any issues of concern can be quickly and efficiently addressed. In a synchronous, or real-time, class session, an instructor must attend to

several aspects of the e-learning event, including student text chat communication, checks for understanding via interactive polls, and the liquidity effect in online learning experiences.

Another recommendation for teaching practice in conducting an online lecture is that specific modifiers should be used when discussing a visual art object, or when giving directions, in order that the liquidity effect doesn't subvert the community of inquiry. When discussing a visual art object, the Horizon Wimba application makes it possible for an online teacher to annotate art images so that students can be carefully directed to attend to the appropriate details as they are being discussed. This tool should be used frequently in an online lecture. Additionally, more specific modifiers should be used in the delivery of the spoken lecture. Ensure that students understand what is being discussed by accurately directing them to cast their attention at specific portions of the image. Avoid generalized modifiers such as "this" or "that" so that students will not be confused.

Student Disposition and Its Role in E-Learning

It is interesting to note that Chul, however, decided to carry through with the day's work. Even though his group's activity was a disaster, he found a way to make his learning experience a success. What can we say about Chul's resilience and his resolution to complete the assignment in the face of such adversity? It appears that much of his success in this e-learning event is due to his disposition. It would have been simple for him to give up on the assignment, yet his individualistic tendencies and his determination provided him with the focus he needed to see his work through to completion.

It is the importance of student disposition, as seen in Chul's work in the online chat, that serves as another thematic conclusion we can make about the nature of e-learning events. A

student's disposition, more than his or her learning style, significantly influences his or her success in an online learning enterprise. This is true because all learning styles can work well in the online classroom environment, particularly when an online course utilizes a variety of approaches to e-learning events (Palloff & Pratt, 2001).

Another example of the importance of student disposition in e-learning, found in Chapter Four, is Tricia's experience with the online lecture. For Tricia, the online lecture was an unsuccessful e-learning event. She did not learn anything by merely listening to her face-to-face counterparts talk about their art objects that day. Nor, did she find the comments her peers and I were making to be of any real value in helping her learn. Rather, because of her socially oriented disposition, Tricia found the online lecture to be a waste of her time. She did not understand how I could expect her to learn without being able to see what the lecture hall students were referring to as they talked. Therefore, she shut down, isolating herself from the community of inquiry altogether. Because she was an online student, I could not perceive her disinterest and frustration like I might have been able to do with a face-to-face learner. As a result, the problem went undiagnosed as I continued my online lecture.

Teaching Recommendations

At the beginning of the course, an online teacher must assess the students' level of proficiency with the technology that will be required in the class. Using a simple online survey, discover how much experience students have with computers. Do students know how to conduct an Internet "search"? Can they use a word processing application? How familiar are the students with using e-mail, chat rooms, and online bulletin boards? These questions should be tailored to the technology applications that will be used in a class.

If students will be using an application such as Adobe Photoshop, for example, it is important to know how familiar they are with it. What tools do they know how to use? What version of the software have they used? Based on students' answers to these, and similar, questions, an online teacher can structure online tutorial sessions accordingly. These tutorials could be offered early in the semester to alleviate any potential problems students might encounter as they approach their coursework.

The Importance of Multitasking in E-Learning

A final theme that emerged from many of the e-learning events conducted in this study deals with multitasking in the online classroom. Multitasking appears to have been a vital skill that separated the more successful students from the less successful ones. It took several different forms. Sometimes, students looked at Internet websites of importance to some topic of discussion they were having a text chat about while they listened to the online lecture. At other times, students kept an eye on the Horizon Wimba text chat as they wrote responses to course assignments using their word processing software. At any given moment in an e-learning event, an enterprising student might be engaged in three or four different course-related activities at the same time.

Perhaps the most vivid example of the importance of multitasking in e-learning is the one provided by Catherine's experience in the online lecture. She was actively engaged in two major endeavors simultaneously: she attended to the Horizon Wimba session and to the course WebCT site. In each of these separate online venues, Catherine performed several tasks, again, simultaneously. In the Horizon Wimba session, she looked at the PowerPoint slides I showed to the class, listened to my voice, and chatted with her peers about the lecture material. On the

WebCT site, she looked at the images of her peers' art objects, read what they had posted about them, and chatted with the handful of her classmates that had assembled in the general chat room.

I contrast Catherine's success in multitasking during this e-learning event with the trouble that some of her peers had. Theresa, in particular, exhibited the characteristics of a student who had not yet learned the technique of multitasking. As a result, her experience in the online lecture was less than successful. She complained that she could not chat with her peers and look at the images of their art objects at the same time. She was also unable to contribute quality comments to the WebCT chat. It appears that Theresa did not experience the e-learning event to its fullest potential because she had not yet mastered the important skill of multitasking.

Multitasking is not only an important skill, but is a reflection of the way the human mind works when utilizing computer technology. John P. Cuthell (2002) writes:

> [T]he extent to which students use them [computers] for work illustrates the ways in which the computers are not simply artefacts [*sic*] that reinforce intuitive understanding and ways of knowing, but rather an integration with the understanding and the thought processes. Knowledge is therefore constructed by the learner, as part of the work process. (p. 93-4)

It becomes important, if we embrace this claim, to present students with opportunities to draw on the multiple tasks that quality e-learning events require. Their experiences with such opportunities foster meaningful learning.

Teaching Recommendations

It appears that students find success in e-learning events when they are able to engage in multiple learning tasks simultaneously. Students, like Catherine in Chapter Four, fight complacency when they take an active role in aspects of their knowledge construction. When

students passively receive information, they meander through lessons that are not immediately applied to a concrete operation.

For students to utilize the knowledge they are constructing in the course of a class, teachers must present them with specific problems of inquiry. These problems could be like puzzles that students solve as they work through multiple learning tasks. For instance, students find one piece of the puzzle in lecture content while they discover another through discourse with their classmates. A third piece of the puzzle is visible only when a student processes new information by writing brief synopses of that information. Students acquire a final piece through active investigation using supplemental tools of inquiry. While these tools might be textbooks and other similar written materials, interactive computer technologies such as Web-enabled handheld devices and laptops open up new worlds of information to students. Access to that information is not the goal, in and of itself, as this piece is only useful when a student puts it in its place with the others to solve the puzzle. Herein lies the powerful potential of purposeful multitasking in the art appreciation classroom.

Of course, it is essential that online pedagogues provide students with strategies for growing familiar with multitasking in an educational situation. We might refer to such an educational aptitude as *multiskilled*. To assist students in becoming multiskilled, I suggest that teachers must consider the scaffolding students need to successfully navigate certain e-learning events. It is important to accommodate students as thoroughly as possible when they are being challenged with a new direction in the online art appreciation class. Tricia's need for a visual image of the art objects her lecture hall counterparts were discussing in Chapter Four's case of the online lecture provides a prime example of the importance of providing scaffolding. Many students in this day and age are still unfamiliar with interactive computer technologies, and find

themselves at a loss when they embark upon new learning experiences in the online art appreciation class.

Suggestions for Future Research

In this section, I propose possible extensions of my research. I discuss ways that others in the field of art education might pursue future work in researching the use of e-learning in art appreciation education. Of particular importance are arts-based educational research methodologies that might serve as potential tools of inquiry into the online art appreciation classroom. I elucidate ways that future research might aid educational researchers in understanding the nature of e-learning. By grasping the intricacies of e-learning, we may gain valuable insights into the nature of learning, in general.

As this study was primarily an investigation into what e-learning events in my classroom *look* like, I selected a methodology of educational criticism. I chose this methodology because of the unique manner in which educational criticism appeals to the visual senses with its emphasis on rich portrayal of an educational phenomenon in such a way that the reader is able to "see" the scenario. In addition to providing a reader with a window into the nature of the e-learning events in this study, I have attempted to evaluate my teaching in order to inform others how online distance learning illuminates student learning, as a whole.

These dual aims of educational criticism lie within the goal of much of arts-based educational research. A particularly compelling theoretical rationale underlying arts-based educational research is that it is a publicly minded methodology. By this, I mean that a major goal of arts-based educational research is that an educational researcher can share the results of educational research in such a way that a broader, less informed public is ushered into significant

issues in education. More evocative and personal renderings of educational research findings often serve well to provide an audience with a connection to the research.

My choice of an arts-based educational research methodology was additionally one based on the nature of the research I conducted. The kind of questions I asked played a significant role in my decision making processes, as did the "unnatural" alternative learning environment of my online art appreciation class. Shulman (1988) notes that typically, in qualitative studies, "the researcher is attempting to portray the workings of circumstances that differ dramatically from what typically presents itself in the 'natural' functioning of our society and our educational systems" (p. 14). As e-learning continues to be an approach to education that is still somewhat outside the fray, I believe that qualitative, and particularly arts-based, approaches to educational research are most appropriate to future research I might conduct. What follows are some suggestions for additional avenues of arts-based educational inquiry that may provide us with further answers to the primary research question of this study, which is: What do e-learning events look like when post-secondary art appreciation is taught online?

Future Arts-Based Educational Research Endeavors

Rhythmic evaluation of e-learning events.

Several studies (Cahnmann, 2000; Erickson, 1995; Foster, 1995) have utilized an arts-based methodology to attend to the rhythms of educational phenomena. I propose that such a rhythmical approach to educational research could be adapted to online distance learning in art education. Future research could attend to the rhythms of learners engaged in e-learning events. The rhythms and sounds one would investigate include the periods of time that a user views certain computer windows, clicks a mouse or strokes a keyboard, user "out-loud-thinking," or chat room activity. The supplemental data such rhythms would provide could allow us to glean

important information about student learning in e-learning activities. Through careful observation of students' rhythmical interaction with computer technologies, we might be able to thoroughly evaluate the role that time plays in e-learning events. In so doing, we might be able to clearly understand the temporal shift, and its impact on student learning.

The following example elucidates the importance of rhythmic study in e-learning research. If I were to try to understand an educational chat room discussion through transcription alone, I would only be viewing a small portion of the educational activity. I would gain a much more holistic perspective on the chat by using the sensibilities of a musician to view or listen to the pauses, periods of sustain, program sounds, user verbalizations, and any other clues that might escape a non-rhythmic interpretation of the e-learning environment. While all of these rhythms would be nearly impossible to process all at the same time, one might use videotape recordings as an aid after making initial on-site observations.

Documentary film/video making.

The resulting recordings could become another avenue for future research in e-learning, as well. They might serve as a way to carefully document e-learning research settings. This aspect of research is especially important in e-learning because much of the research occurs at geographically distant locations, making it physically impossible for a researcher to attend to every individual site of learning. A researcher could provide video cameras to off-campus research participants who are willing to document their learning activities. Additionally, a web-cam might prove to be a tool that allows the researcher to observe the scene at a distance. This device can provide a researcher with an archived web chat. Apple's digital video editing program, iMovie HD, for example, has the capability to record the video stream of a distant user's web-cam.

A documentary film/video might serve as the representation of the data. Through this kind of arts-based presentation of educational research, one can share his or her findings about the little known nature of e-learning with a broader public. A maker of film/video employs certain sensibilities when approaching his or her craft. The products of that craft would permit an audience to see the events of e-learning through a unique perspective. Barone (2003) describes the goal of such *film-based educational research* as challenging the imaginary image the broader public holds regarding education. He sees this "prevailing educational imaginary" (p. 204) as damaging, and embraces the possibility of its eclipse using high quality film/videos about educational issues.

Other Potential Areas for Future Research

Changes to the map of e-learning.

Marzano's (2001) description of the cognitive system of human thought is an important conceptual guide for the Map of E-Learning that was used in this study. He also discusses two other systems of human thought: the *metacognitive* and *self-system*. These two realms were not included in the conceptual framework for this study, and I did not consider them in the mapping of e-learning events. However, they offer much to consider in future research.

Possible future endeavors into the nature of e-learning might evaluate if e-learning events interact with these two additional systems of thought. If so, how do they affect student learning within the community of inquiry? If, as Marzano (2001) contends, the processing of information begins in the self-system before it reaches the metacognitive and cognitive systems, investigation into this realm of human thought is extremely important. Because of the hierarchical structure of these three systems:

> [T]he status of the various factors within one system affects the status of the various factors within lower systems. For example, if the self-system contains no beliefs that would render a given task important, the individual will either not engage in the task or will engage with low motivation. (Marzano, 2001, p. 13)

Student engagement in e-learning events can be more accurately identified and evaluated by attending to the influence of the self- and metacognitive systems on the educational outcomes of online distance learning, we can more accurately identify and evaluate student engagement. Additionally, future research in these areas might provide further insight into some of the dispositional factors affecting student learning in the online classroom.

Mobile learning, or M-learning.

This study was not necessarily about any one particular computer technology. I am wary of investigations into specific tools of e-learning because the scope of inquiry is somewhat limited to the technological development of a given period in time. In other words, as soon as we come to understand the educational impact of a particular computer technology, another more technologically advanced version replaces it. With the exponential rate of growth in computer technologies, any such educational research endeavor is doomed to become rapidly outdated. I do not believe that is a wise way to conduct research.

However, I am interested in the potential of educational research into a permutation of interactive computer technology and its possible role in online distance learning. The handheld mobile device might prove to be a powerful tool for education in m-learning, or mobile learning. Studies have been conducted (McFadden, Price, & Marsh II, 2002) utilizing PDAs for research and communication by "on-the-go" teachers. Cellular phones and other mobile devices equipped with Instant Messaging capability would make it possible for students to have small group chats while conducting field research. The use of these, and other similar, technologies reveal much about the nature of online distance learning.

There is a great need for future research into the rapidly changing and exciting realm of online distance learning. The goal of such endeavors should continue to be the illumination of issues of student learning that events of e-learning illuminate. E-learning holds potential for increasing our understanding of what learning is, and what it could be.

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APPENDICES

APPENDIX A

Glossary of Technical Terminology

*404: Not Found- A status command generated by a server when it has been unable to locate a requested web address.
*Asynchronous- Interaction that is not synchronized; that is, not occurring at predetermined or regular intervals.
*HTTP Port ID 80- A command that permits a firewall protected computer to make a TCP connection through a proxy server in a procedure known as HTTP Tunneling.
*HTML- Abbreviation of HyperText Markup Language, the authoring language used to create documents on the World Wide Web.
*HTTP- Abbreviation of HyperText Transfer Protocol, the underlying protocol used by the World Wide Web. HTTP defines how messages are formatted and transmitted, and what actions servers and browsers should take in response to various commands.
+Hybrid- A distance learning course that requires a combination of face-to-face instruction and online learning.
*Internet- A global network connecting millions of computers.
*LOL- A shorthand form of "Laugh Out Loud" often used to express that one is laughing during a text chat.
*Pixelated- The visual distortion created by altering the smallest image-forming units of a computer's video display.
*Synchronous- Interaction that occurs at the same time through the use of computer technologies.
*URL- Abbreviation of Uniform Resource Locator, the global address of documents and other resources on the World Wide Web.
*WWW- A system of Internet servers that support specially formatted documents, which are formatted in HTML.

Source:

*Webopedia, available on the World Wide Web at http://www.webopedia.com.

+University of Hawai'I at Hilo Library, available on the World Wide Web at http://library.uhh.hawaii.edu/lib_services/policies/distance_learning.htm

APPENDIX B

Human Subjects Study Application Form

Check One
New Application: ☐
Resubmission*: ☐ **Revision** ☒ *(All changes must be highlighted)*

**NOTE: A new application is required every five years.*

Human Subjects Office
University of Georgia
612 Boyd GSRC
Athens, Georgia 30602-7411
(706) 542-3199

HUMAN SUBJECTS RESEARCH APPLICATION

MAIL 2 COPIES OF APPLICATION TO ABOVE ADDRESS

(Check One) **Dr.** ☐ **Mr.** ☒ **Ms.** ☐	*(Check One)* **Dr.** ☐ **Mr.** ☐ **Ms.** ☐
(Check One) **Faculty** ☐ **Undergraduate** ☐ **Graduate** ☒	*(Check One)* **Faculty** ☐ **Undergraduate** ☐ **Graduate** ☐
Robert Daniel Quinn [redacted]	
Principal Investigator **Soc. Sec. No.**	**Co-investigator** **Soc. Sec. No.**
Art Education, Lamar Dodd School of Art, Jackson St. Visual Arts Building Athens, GA 30602	
UGA Department AND UGA Mailing Address *(Include department even if living off campus or out of town)*	**UGA Department AND UGA Mailing Address**
Mailing Address (if you prefer not to receive mail in dept.)	**8:00 a.m. - 5:00 p.m. Phone Number (s)**
Home-[redacted] Office-706-542-8415 rdquinn@uga.edu	
Phone Number (s) (REQUIRED) **E-Mail**	**Phone Number (s)** **E-Mail**
****Signature of Principal Investigator**	**Signature of Co-investigator** *(use additional cover sheets if more than one)*

UGA Faculty Advisor: Dr. Pamela G. Taylor (**Name**) | Art Education (**Dept.**) | Jackson Street Visual Arts Building (**Building**) | [redacted] (**Phone No.**)

****Signature:** _____ **Soc. Sec. No.:** _____ **Date:** _____

***Your Signature indicates that you accept responsibility for the research described in this application.*

If funded: _____ _____
*****Sponsored Programs Proposal#** **Name of Funding Agency**

****By listing a proposal number, you agree that this application matches the grant application and that you have disclosed all financial conflicts of interest (see Q6a)*

TITLE OF RESEARCH: Online Learning in Art Education: Implications for Post-Secondary Art Appreciation Pedagogy

NOTE: SUBMIT 4-6 WEEKS PRIOR TO YOUR START DATE.

Start Date: June 10, 2004 *(Must be 4-6 weeks after date of submission to IRB)*

End Date: June 9, 2005 *(Approval is granted only for a year at a time)*

Check all that apply: Investigational New Drug ☐ **Exceptions to/waivers of Federal regulations** ☐
***If yes, provide details*:**

Deception ☐ **Illegal Activities** ☐ **X-RAY/DEXA** ☐ **Minors** ☐ **Pregnant Women/Prisoners** ☐

IRB.PF (www) 1/04

MRI/EEG/ECG/NIRS/Ultrasound/ Blood Draw ☐ Moderate Exercise ☐ Data Sets ☐ RP Pool ☐

HUMAN SUBJECTS RESEARCH APPLICATION

INSTRUCTIONS:

1. ***Type responses to all 11 questions (all parts) listed below.***
2. ***Do not answer any question with "see attachments" or "not applicable".***
3. ***Submit original plus one copy to the Human Subjects Office.***
4. ***We will contact you via email if changes are required. Allow 4-6 weeks.***

IMPORTANT: Before completing this application, please determine if the project is a research project. Check the federal definition of research at http://www.ovpr.uga.edu/faqs/hso.html or call the Human Subjects office at 542-3199. The IRB only reviews research projects.

1. **PROBLEM ABSTRACT:** ***State rationale and research question or hypothesis (why is this study important and what do you expect to learn?).***

The purpose of this study is to investigate the affects of online education as it influences pedagogical strategies that I employ in my teaching. My specific research questions are: What happens when art appreciation is taught online? What does it mean for the student...for the teacher? Does the use of computer technology in online learning change my approach to teaching and learning in art appreciation? These issues will be addressed to explore the implications for art education pedagogy. I hypothesize that the knowledge construction and meaning making of college students learning art in the online classroom will be of a different nature than that of their peers in the traditional art classroom. As a result, I believe I will be able to evaluate the pedagogical techniques that contributed to students' experiences, outcomes, and understanding. My own perceptions and practices will be complemented with that of my students to illustrate the ways that electronic pedagogy influences this approach to art appreciation education. Each of my specific research questions will be considered through the theoretical framework of e-learning proposed by Garrison and Anderson (2003). Its basic premise is that purposefully reflective and collaborative activity in the online classroom can be promoted through the use of asynchronous pedagogical techniques that establish cognitive presence, social presence, and teaching presence.

2. **RESEARCH DESIGN:** ***Identify specific factors or variables, conditions or groups and any control conditions in your study. Indicate the number of research participants assigned to each condition or group, and describe plans for data analysis.***

The research methods for this study are drawn from a range of research methodologies. The basic design is a descriptive inquiry into pedagogical strategies informed by the perceptions and practices of the researcher and participants. The participants are students who are all enrolled in a section of ARTS 2000, which is an Art Appreciation course that I will be teaching during the summer of 2004. This course has a potential enrollment of 130. As some students may not wish to participate in this study, I am targeting a sample of volunteers, some of which will participate in an entirely online Art Appreciation course, and others of which will participate in a traditional, face-to-face Art Appreciation course. As the primary instructor for the course, I will be drawing from the research methodology of action research for data collection and analysis. Additionally, data analysis will be performed using a variety of ethnographic methods including e-mail and chat room transcriptions, portfolios, and videotaped informal interviews. Triangulation will be achieved through arts-based qualitative inquiry methods of connoisseurship and educational criticism (Eisner, 1991), ethnographic methods of digital ethnography (Goldman-Segall, 1993), and action research (Kincheloe, 2003).

3. **RESEARCH SUBJECTS:**

a. ***List maximum number of subjects, targeted age group (this must be specified in years) and targeted gender*;**
Maximum number of participants is 130.
Target age range is 18-22 years.
Targeted gender is both Male and Female.

b. ***Method of selection and recruitment - list inclusion and exclusion criteria. Describe the recruitment procedures (including all follow-ups).***
Students will be volunteering to participate in both the online and traditional groups for this study. Students who participate in the online group will be purposefully sampled based on their level of experience and comfort with interactive computer technology. Purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned. Some criteria to guide the purposeful sampling of participants in the online group are: access to certain technology, including a computer with hi-speed internet connection, soundcard, and speakers, scanner and/or digital camera, and web-cam with microphone. Access will also be available to the participants through the Lamar Dodd School of Art's computer lab, which has a capacity of 17 students. It is imperative that at least 15 students be in this online group.

c. ***The activity described in this application involves another institution (e.g. school, university, hospital etc.) and/or another country.*** **Yes** ☐ **No** ☒
If yes, provide the following details:
1) Name of institution:
2) County and state:
3) Country:
4) ***Written letter of authorization (on official letterhead only)*****/ IRB approval:**
Attached: ☐
Pending: ☐

d. ***Is there any working relationship between the researcher and the subjects*?**
Yes ☐ **No** ☒. ***If yes, explain.***

e. ***Describe any incentives (payment, gifts, extra credit).***
Extra credit cannot be offered unless there are equal non-research options available.
No incentives will be offered.

4. **PROCEDURES:** ***State in chronological order what a subject is expected to do and what the researcher will do during the interaction. Indicate time commitment for each research activity. And detail any follow-up.***
June 10: During this first class meeting of the semester, students who volunteer to be research participants will be divided into online and traditional groups during the class time (2:15 PM-4:30 PM). The online group will be given a demonstration of proper use of computer technology they will be using in this study.
June 11-25: Participants will participate in 11 class meetings (MTWRF, 2:15 PM-4:30 PM) with the traditional group meeting in the traditional classroom with their non-participant classmates, and the online group meeting asynchronously at their personal computers via a class WebCT site. Three asynchronous postings will be required of all online group participants each week of the course. Using the course WebCT site, these participants will post reflective assignments that will be based on course

material. All of these reflections and any e-mail correspondence between instructor and experimental group participants will be used in data collection. Additional data will be gathered from archived synchronous class meetings, during which the online group will meet during the class time via the Internet-based computer application Horizon Live. Horizon Live meetings will occur once a week throughout the study. Researcher will complete daily reflections on student involvement drawing from classroom observations, email correspondence, and personal notes. These reflective journal entries will also be used as data.

June 24: All students will complete a hands-on artwork , with participants in traditional group turning in artwork during class, and online group submitting their artwork via WebCT. Researcher will assess work by using Rubric for Endeavor #1 (See attached rubric). The artwork and the evaluations of them will be used as data.

June 25: Research participants in the traditional group will take a midterm exam. This test will be composed of shorter, open-ended questions and longer, essay questions. Research participants in the online group will complete a midterm exam that is similar to their classmates' exam, composed of shorter, open-ended questions and longer, essay questions. Test results will be used as data.

June 30-July 7: Participants will participate in 6 class meetings (MTWRF, 2:15 PM-4:30 PM) with the traditional group meeting in the traditional classroom with their non-participant classmates, and the online group meeting asynchronously at their personal computers via a class WebCT site. Three asynchronous postings will be required of all online group participants each week of the course. Using the course WebCT site, these participants will post reflective assignments that will be based on course material. All of these reflections and any e-mail correspondence between instructor and experimental group participants will be used in data collection. Additional data will be gathered from archived synchronous class meetings, during which the online group will meet during the class time via the Internet-based computer application Horizon Live. Horizon Live meetings will occur once a week throughout the study. Researcher will complete daily reflections on student involvement drawing from classroom observations, email correspondence, and personal notes. These reflective journal entries will also be used as data.

July 7: All students will complete a second hands-on artwork, with students in traditional group turning in work during class, and online group submitting their artwork via WebCT. Researcher will assess work by using Rubric for Endeavor #2 (See attached rubric). The artwork and the evaluations of them will be used as data.

July 8: Participants will take final exam by completing a test composed of shorter, open-ended questions and longer, essay questions. Participants in traditional group will do so in the traditional classroom; participants in online group will do so online. Portfolios and evaluations of portfolios will be used as data, as will exam results.

July 9-August 9: Researcher will conduct informal interviews (See attached interview protocol) of selected participants. Using video recordings for data collection, these interviews will be used as data. Participation by at least 5 members of both the traditional and online groups is desired.

August 9-June 9, 2005: Data analysis will begin. Researcher will compile results, analyze using various means, and report on findings.

Duration of participation in the study: _12_ Months
No. of testing/training sessions:__34__ Length of each session:__2 1/4 hours___

If your procedures include work with blood, bodily fluids or tissues, submit a MUA from Biosafety.
Attached ☐ ***Pending*** ☐ ***Not Applicable*** ☐ ***Explain why not?***

Total amount of blood draw for study:____ml Blood draw for each session: _____ml

5. **MATERIALS:** ***List all questionnaires/ instruments/equipment.***

Rubric for Endeavor #1

Check all other materials that apply and are attached:
Interview protocol ☒ **Debriefing Statement** ☐ **Recruitment flyers or advertisements** ☐
Consent/Assent forms ☒
If no consent documents are attached, justify omission under Q. 8

6. **RISK:** ***Detail risks to a subject as a result of data collection and as a direct result of the research and your plans to minimize them and the availability and limits of treatment for sustained physical or emotional injuries.***

NOTE: REPORT INCIDENTS CAUSING DISCOMFORT, STRESS OR HARM TO THE IRB IMMEDIATELY!

a. **CURRENT RISK:** ***Describe any psychological, social, legal, economic or physical discomfort, stress or harm that might occur as a result of participation in research. How will these be held to the absolute minimum?***

Any student that participates in a class will be under normal levels of stress, especially when taking tests or completing attitude inventories. Additional stress may be caused by the nature of the subject matter involved with the course. Many students are uncomfortable with art, especially the creation of artwork. Careful and thorough instruction will be provided in an attempt to alleviate such stress. Lastly, students in experimental group may experience stress due to malfunctioning computer hardware or software. The researcher will be available to help any student who is experiencing such trouble in an effort to reduce stress for participants.

Participation or non-participation in this study will not affect a student's standing in the class or class grade. Students will be made aware of the voluntary nature of this study through the consent form they will receive prior to the first class meeting.

Is there a financial conflict of interest (see UGA COI policy)? **Yes** ☐ **No** ☒
If yes, does this pose any risk to the subjects?

b. **FUTURE RISK:** ***How are research participants to be protected from potentially harmful future use of the data collected in this project? Describe your plans to maintain confidentiality, including removing identifiers, and state who will have access to the data and in what role. Justify retention of identifying information on any data or forms.***

DO NOT ANSWER THIS QUESTION WITH "NOT APPLICABLE"!

Anonymous ☐ **Confidential** ☒ ***Check one only and explain below.***

Pseudonyms will be used to protect the identities of all participants. Digital files of all participants' artworks will be stored in sole possession of the researcher for continued data analysis in the future. Tests, attitude inventories, and course website data will also be stored in secure location with access to researcher only.

Audio-taping ☒ **Video-taping** ☒
If taping, how will tapes be securely stored, who will have access to the tapes, will they be publicly disseminated and when will they be erased or destroyed? Justify retention.

Both audio and video taping methods will be used for data collection. Only the interviews will be recorded. All footage will be digitally documented and stored in digital files on researcher's computer. They will be stored in the sole possession of the researcher for ten years, and then destroyed. Data will be used for scholarly presentations at professional conferences, with the identities of all participants remaining confidential. To avoid recording non-participating students, the research participants will be recorded in small groups in a separate room from the rest of the class.

7. **BENEFIT:** ***State the benefits to individuals and humankind. Potential benefits of the research should outweigh risks associated with research participation.***

a. ***Identify benefits of the research for participants, e.g. course credit, educational benefits*:**
Participants in this study will receive 3 hours of course credit, contingent upon successful completion of academic content, for their involvement in the study. Their educational experience will be one of value, as they will have discovered and explored the world of art and how it is affecting and being affected by 21st century technology.

b. ***Identify any potential benefits of this research for humankind in general, e.g. advance our knowledge of some phenomenon or help solve a practical problem.***
Distance learning is the educational platform used frequently by institutions of higher education for populations of non-traditional students. Often these students are separated by significant amounts of distance and are typically pursuing their degree part-time. Distance learning programs have been successfully implemented by colleges and universities around the globe through the use of computer technology. Numerous pieces of software provide a virtual classroom where participants can interact with one another both synchronously and asynchronously. Instructors are afforded the means to post assignments and feedback and monitor student activity. Not only has distance learning been integrated into post-secondary education, but it has been adopted by K-12 education as well. Even though distance learning in K-12 is typically used as a supplement to traditional schooling methods, it is increasingly becoming a means of substituting the physical classroom with a virtual one. Such atypical educational experience is finding support among student athletes who find themselves constantly out of school due to athletic competitions, students with disabilities, and students faced with the realities of alternative schooling due to behavioral disorders or other social deficiencies. Distance learning provides students in situations such as these with options for educational success. While much of distance-learning's appeal resides in the fact that it does indeed provide students with flexibility, some disciplines have latched onto the concept because of the ease with which instruction can be given in the virtual classroom. Subjects that are heavily text-based, such as literature, history, and education, are particularly amiable toward the incorporation of distance learning techniques. Other subjects, such as math or science, rely heavily on the manipulation of actual objects through hands-on activities. Art is certainly more closely aligned with one of these studio-based disciplines. Since they are so textually and discussion based, much of the criticism and appreciation aspects of the study of art have been logically addressed in the virtual classroom. However, it is the studio portion of the discipline of art that has proven to be a difficult endeavor for creators of distance-learning experiences. Through the findings of this research project, acceptable and appropriate educational experiences for learners of art in the virtual classroom can be more adequately designed. More importantly, pedagogical strategies used in online learning will be translated into implications for reforming art education in general.

8. **CONSENT PROCESS:**

a. ***Detail how legally effective informed consent will be obtained from all research participants and, when applicable, from parent(s) or guardian(s).***
Participants will be mailed a cover letter and consent form prior to the first meeting of the course. They will be instructed to bring their completed consent forms with them on the first day of class so the researcher may collect them. Since the participants are college students, they will be older than the age of 18. If any participants are under the age of 18, parental permission forms will be submitted as a change to the research protocol as soon as I discover they are needed.

Request for waiver of signed consent Yes ☐ **No** ☒

If yes, a full explanation must be submitted for approval, including assurance that risk to the participant will be minimal. Also submit a consent script that will be used in lieu of a form.

b. **Deception Yes** ☐ **No** ☒

If yes, describe the deception, why it is necessary, and how you will debrief them. The consent form should include the following statement: "In order to make this study a valid one, some information about my participation will be withheld until completion of the study."

9. **VULNERABLE PARTICIPANTS: Yes** ☐ **No** ☒

Minors ☐ **Prisoners** ☐ **Pregnant women/fetuses** ☐ **Elderly** ☐

Immigrants/non-English speakers ☐ **Mentally/Physically incapacitated** ☐ **Others** ☐ ***List below.***

Outline procedures to obtain their consent/assent to participate. Describe the procedures to be used to minimize risk to these vulnerable subjects.

N/A

10. **ILLEGAL ACTIVITIES:**

NOTE: Some ILLEGAL ACTIVITIES must be reported, e.g. child abuse.

Does the data collection relate to illegal activities? **Yes** ☐ **No** ☒

If yes, explain how subjects will be protected.

N/A

11. ***STUDENTS check all that apply to this application*:**

This application is being submitted for **:**

Class assignment ☐ **Pilot study** ☐

Applied Project, Thesis or Exit Exam Research ☐ **Dissertation Research** ☒

CONSENT FORM

I, _____, agree to take part in a research study titled "ONLINE LEARNING IN ART EDUCATION: IMPLICATIONS FOR POST-SECONDARY ART APPRECIATION PEDAGOGY", which is being conducted by Robert D. Quinn of the Art Education Department at the University of Georgia, Phone # (706)542-8415, under the direction of Pamela G. Taylor, Art Education Department, University of Georgia, Phone # [redacted]. I understand that my participation is voluntary. Participation or non-participation will have no impact on my standing in the class or my grades. I can stop taking part at any time without giving any reason, and without penalty. I can ask to have information related to me, returned to me, removed from the research records, or destroyed. I will not directly benefit from this research.

The purpose of the study is to investigate the effectiveness of online distance learning in art. My participation in this research may lead to information that could make possible the design of acceptable and appropriate educational experiences for learners of art in the virtual classroom.

If I volunteer for this study, I will be asked to do the following things:

- Allow the researcher to use my reflections and any e-mail correspondence between instructor and me as data.
- Allow the researcher to use my artwork and portfolio and their evaluations as data.
- Allow the researcher to use test results as data.
- I may be asked to participate in informal videotaped interview with the researcher at the end of the course for a period of 2 hours.

No risks or discomforts are expected in this study.

The results of this participation will be confidential. Since some activities in this study will be audio- or videotaped, I have the right to review/edit the tapes. The tapes will be accessible only to the researcher and will only be used for educational purposes. They will be kept under the watch of the researcher for ten years, and will provide data for continuing study and publication. After the ten-year period is over, the tapes will be destroyed. I give my consent for the researcher to use the videotapes for such future use. The researcher will answer any further questions about the research, now or during the course of the project, and can be reached by telephone at (706)542-8415.

I understand that I am agreeing by my signature on this form to take part in this research project and understand that I will receive a signed copy of this consent form for my records.

_____	_____	_____
Name of Researcher	***Signature***	***Date***

Telephone: _____
Email: _____

_____	_____	_____
Name of Participant	*Signature*	*Date*

Use of audio/visual records:

I understand that audio and videotapes and copies of transcripts will be kept indefinitely by the researcher for research and educational purposes. There is a possibility that audio/video tapes with my voice/ image could be used in either teaching or conference presentations. This is subject to my permission (see below).

Records can be shown at meetings of researchers.

Audio_____ Video_____

[Please initial]

Records can be shown in classrooms to students.

Audio_____ Video_____

[Please initial]

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your rights as a research participant should be addressed to Chris A. Joseph, Ph.D. Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

APPENDIX C

Using the Horizon Wimba E-board

Horizon Wimba not only displays the PowerPoint slides, but also allows the instructor to annotate the slides using the Horizon Wimba E-board tools panel (see Fig. C.1).

Fig. C.1. The E-board tools panel of the Horizon Wimba interface.

The Horizon Wimba E-board tools panel is just one of the features available for an instructor when s/he wishes to move the online presentation beyond the standard, static use of the PowerPoint slides. In so doing, the E-board essentially becomes a platform for conducting a whiteboarding session. I will describe the way each of the E-board tools works, moving from the upper-left-most button of the panel down and to the right.

An instructor can click on the upper-left-most button of the tools panel to select the arrow tool. Once selected, a teacher can insert an arrow at any position on the slide image. Holding the "shift" key as one selects it can change the direction of the arrow. In addition to the use of arrows, an instructor can also use the drawing tools to, using a mouse, draw circles, lines, and freeform lines. The E-board tools panel also allows the instructor to annotate the slides by displaying text on them. The "Undo" button allows the instructor to remove the most recent annotation s/he has made using the E-board tools. One can adjust the width of the lines and circle outline to be one of three thicknesses by clicking on the appropriate button on the Horizon Wimba E-board tool panel. Using the mouse to click on the desired color buttons of the tool panel can change the colors of the text, lines, and shapes. The long horizontal space below the color palette displays the selected color.

The "Erase" button below the color palette of the E-board tools panel allows the instructor, with the single click of a button, to remove all of the annotations s/he has made. The "Clear" button will not only remove all annotations made, it will remove the image of the PowerPoint slide itself. The "Import" button allows the instructor to load an image on the fly, so to speak, in order to show students an image that had not been previously loaded into the PowerPoint slide presentation. The "Save" button allows an instructor to make a copy of the annotated slide by creating a digital image file. Students could access this file later, as they search the archives of the online lecture. The "Screengrab" button enables an instructor to capture an image of his or her computer screen, in order to share some graphic with his or her online students. This tool would be helpful if a student needed to see the way his or her computer needs to look when completing some kind of process or utilizing some kind of application, for instance. The last tool of the Horizon Wimba E-board tool panel is the "Enable" tool. This

feature allows the students to have a fully functional E-board at their workstations. They, in turn, would be able to utilize all of the same annotation tools that had only been available previously to the instructor. Such a tool might be helpful when students are functioning as moderators or discussion facilitators. Some of these tools might also be helpful during the course of an online lecture.

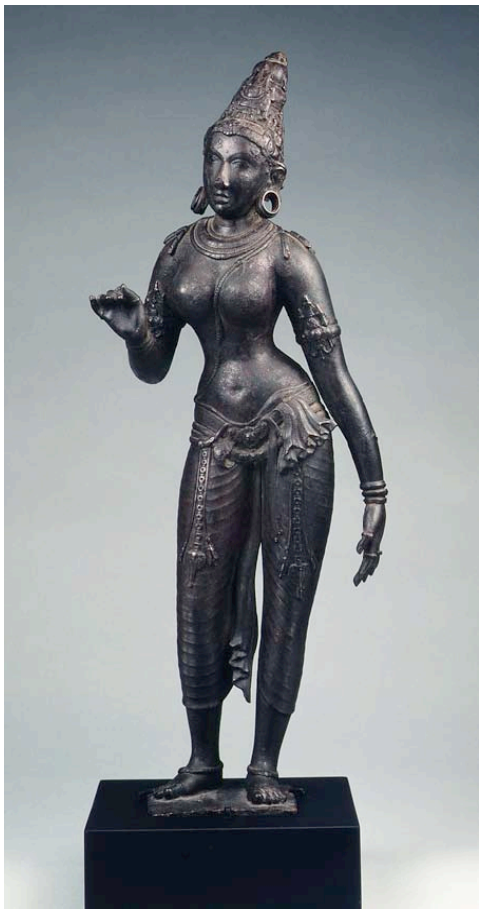

Fig. C.2. Standing Parvati, Chola Period, ca. First quarter of 10th century, Tamil Nadu, India, copper alloy, 27 3/8" in height, Metropolitan Museum of Art, New York.

I did so in another online lecture I conducted during the study. At that time, I was explaining the concept of the contrapposto pose. I used the Horizon Wimba E-board tools to annotate a slide I had displayed. The image on this slide was the bronze *Standing Parvati* sculpture of the Chola Period (see Figure C.2). As I lectured on the features of the contrapposto

pose using the sculpture as a reference, I made quick annotations on the Horizon Wimba slide, as well. The brief text notes, arrows, and line helped the students to know exactly what I was talking about as I was talking about it. A screenshot of the annotated slide is Figure C.3.

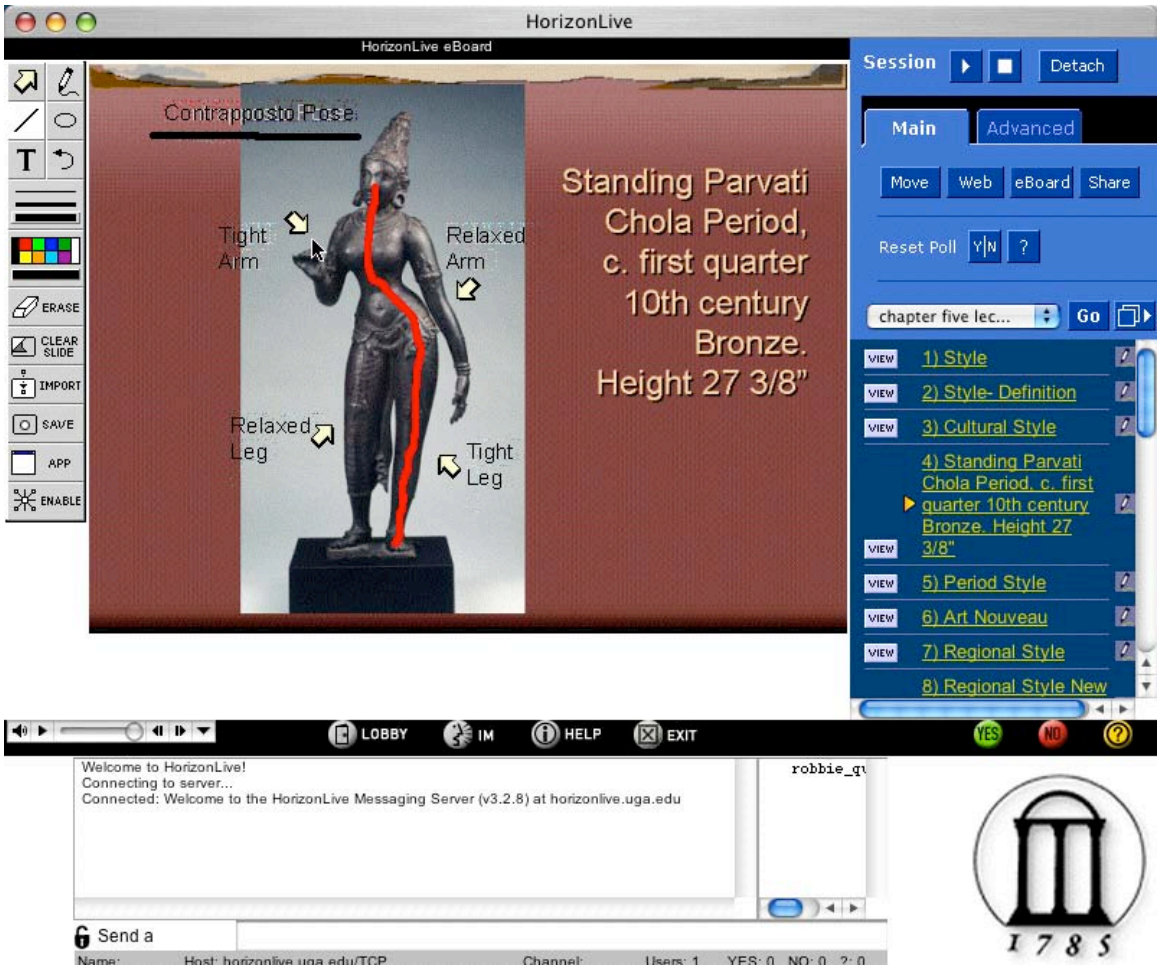

Fig. C.3. Screenshot of an annotated Horizon Wimba slide.

APPENDIX D

Using WebCT Campus Edition (v. 3.8) Chat Rooms

The professional "stretching" I did throughout the semester is striking. I remember the way that I had accessed each of the four WebCT chat rooms shortly after the beginning of the small group discussions. Keeping up with the conversation in one chat room alone is challenging enough a messages come flying in, often from two or three students at the same time. A monumental state of confusion results from the multiplying disorientation caused by four chat rooms.

To make matters worse, the WebCT chat room technology chooses the chat window and activates it based on what the other users are doing. Therefore, I had little control over how I navigated through the four online chats. To illustrate what I mean by this, let me explain how the WebCT chat room technology inhibited my work as an online educator. When I needed to type a message to group one, I clicked in the message entry field at the bottom of the chat room window. If there were any new messages submitted in any of the other chat rooms as I typed, group one's window would become inactive and my message would continue in another, newly activated chat room window. I would immediately realize it, of course, but the time it took to rectify the situation was often several seconds, which (in terms of an online chat) is an eternity.

Sometimes, however, I wouldn't be aware of the fact that this chat room switch was happening as I was typing, and I would unwittingly submit a fragmented text message to the wrong chat room! Once, for example, I tried to type a message as the chat room windows shifted. My submission was, "hhl.y toion" to which Rita justifiably replied, "What Robbie?" I remember feeling stupid. I could only muster an apology. I had no explanation because I had no idea what was happening.

As the semester progressed, I began to understand what was happening, though. More importantly, I figured out how needed to conduct myself as a teacher in an online chat when I am

participating in simultaneous chats. It was necessary for me to quickly prepare my text messages in a word processing document. Then, I would cut and paste from the word processing document into the WebCT chat room. Submitting the response then became a matter of clicking the return key on my keyboard or clicking the send button with my mouse. This approach allowed me to circumvent one of the technological difficulties I faced as an electronic pedagogue, which permitted me to focus more of my effort and energy on my students.

APPENDIX E

Selected Assignments for Online Art Appreciation Course

Endeavor One
Ethnographic Research Endeavor:
An investigation of the self

Aim: To explore the cultural makeup of the self.

Goal: To synthesize personal information regarding the conception of self into a digital collage.

Objectives:
Students will investigate their heritage.
Students will compile resources relating to their cultural constitution.
Students will assemble digital images relating to their conception of self into a digital collage.

Resources:
Computers with Internet access, digital camera, scanner, Adobe Photoshop, WebCT

Method:
June 10- Students will be instructed to use the computer technology necessary for completion of the endeavor. Instruction will center on the use of WebCT, Adobe Photoshop, digital photography and scanning, and other appropriate uses of computer art-making technology.

June 14 through 22- Students will work on their own at their homes, their offices, the library, the Lamar Dodd School of Art computer lab, or any other location that is properly outfitted with the necessary hardware and software. Each student will conduct research on the Internet, in libraries, or with her family to discover the things that have contributed to her individual cultural makeup. She will complete the following tasks:

1. Identify the microcultures to which you belong and fill in the blanks with the appropriate information:
    a. Nationality
    b. Ethnicity
    c. Race
    d. Gender
    e. Class
    f. Religion
    g. Age group
    h. Geographic region
    i. Urban/Suburban/Rural
    j. Other
    k. Other
    l. Other
2. Rate the microcultures above in order of their significance to you, personally. The microcultures that influence you most strongly should receive a high rating, and the microcultures that influence you least should receive a low rating.
3. Using the Internet, a digital camera, or scanner, catalog images that are representative of each of the microcultures you have selected above. Find several examples of each. Make sure

that you are saving all of your digital image files on your computer or a disk in the proper format, and at the correct resolution.

4. Create a digital collage using Adobe Photoshop that contains some or all of your selected images. Give visual weight to the images representing the microcultures that factor highly in your personal makeup. The resulting collage will serve as the final work of art for this lesson.

June 22- Students will submit their completed collage by uploading the image file to the class WebCT site. Submission of artwork should accompany a brief written reflection on the images contained within the collage. Students should discuss why they included certain images, giving reasons for how they represent the microcultures that have served as parts of their individual identity. This reflection should also be uploaded to the WebCT site.

Assessment:

Rubric for Endeavor #1

	Not evident	Emerging	Average	Competent	Outstanding
Collage Criteria:					
Images exhibit digital manipulation	X	X	X	X	X
Artist has conveyed desired personal characteristics	X	X	X	X	X
Entire space is used	X	X	X	X	X
Images appear to cohere	X	X	X	X	X
Written Response:					
Reflection reveals personal traits	X	X	X	X	X
Response contains reasons for inclusion of selected images	X	X	X	X	X
Column Total (add)					
Multiply by	0	1	2	3	4
Total Columns					

Grand Total	

A=19-24
B=13-18
C=7-12
D=1-6
F=0

Comments:

Endeavor Two
Cyber Me[1]:
A digital reflection on Internet-mediation in art

Aim:
To project one's idealized self to others.

Goal:
To design a digital avatar that represents the self, as one wishes to be seen.

Objectives:
Students will investigate the cultural connotations of color, bodily expressions, and language as they relate to communication in art for various cultures.
Students will synthesize various aspects of their personalities and design their visual representation.
Students will evaluate and defend their design based on its culturally sensitive and globally diverse imagery.

Resources:
Adobe® Photoshop®, Adobe® Illustrator®, The Palace (www.thepalace.com), Color Matters (www.colormatters.com)

Method:
June 24-July 7- Students will conduct online research into the cultural connotations surrounding things such as color, which will be used to inform the design of their avatar. An avatar is a virtual person that is used in Internet-applications that require a representation of a user. Examples of such applications are The Palace, AOL Instant Messenger, and Netscape Messenger. With the emphasis of this lesson being on the context of these graphical representations, students will need to design avatars that are true to their personalities yet culturally sensitive. They may take the form of a highly representational image that really looks like a person, or they may opt to design an avatar that is an abstract representation of the person's characteristics or identity.

It is important that students evaluate their avatar design choices on the basis of cultural context, particularly in regard to color choice. Many resources are available on the Internet to help students make informed choices about their choice of colors. Colors should be selected based on the message a student is trying to convey through their avatar to others who will interact with it on the Internet. Other important considerations when designing the avatar are the bodily expressions it possesses (if it is a bodily representation) and/or the text used in the design (if any text is used).

July 8- The final step in this process is that each student will write a brief evaluation of his or her avatar design by describing the decision-making processes that were undertaken to develop the design. He or she should defend those decisions by discussing how the avatar will be seen and perceived by those interacting in online communities with it. This reflective essay will be posted to the Student's Homepage on the WebCT site along with the image file of the avatar design.

Assessment:

	Not evident	Emerging	Average	Competent	Outstanding
Avatar Criteria:					
Image exhibits evidence of use of digital imaging software (excluding avatar-making software available on Internet)	X	X	X	X	X
Artist has conveyed desired personal characteristics	X	X	X	X	X
Color, text, and bodily expressions are carefully chosen	X	X	X	X	X
Written Response:					
Reflection reveals thoughtful defense of decision-making	X	X	X	X	X
Response contains reasons for avatar design	X	X	X	X	X
Column Total (add)					
Multiply by	0	1	2	3	4
Total Columns					

Grand Total	

A=17-20 Comments:
B=13-16
C=9-12
D=5-8
F=0-4

Note:
1. Cyber Me is borrowed from Pamela G. Taylor's work with her Art Appreciation course (For more information see Taylor, 2004).

ARTS 2000: Art Appreciation Online Section
Final Exam Question

Overview:
This take-home final exam question is designed to accompany the artwork you have created this semester in this class. You have engaged in two artistic processes (Ethnographic Research Project collage and Cyber-Me avatar) that have asked you to dig deeply into your personal constitution, on both a surface and in-depth level. The two resulting works have, to a certain extent, provided insight into the things that make you the person that you are. Yet, the works are very different in appearance and design. They provide an interesting point of comparison for revealing the kinds of things that different works of art can disclose to the viewer, even when those works are about the very same thing.

For this exam, I would like you to compare and contrast these two "self-portraits" on a number of different levels. First, describe the differences and similarities in size, medium, scale, shape, media, style, etc. How are they alike and how are they dissimilar in appearance alone? Next, analyze the similarities and differences in treatment of the elements of form and principles of design (see chapters 3 and 4). How does the treatment of these things in each of your works influence the overall visual feel of the artworks? Third, interpret the meanings of the works' similarities and differences. This interpretation should not be a discourse on why you've included the visual components that you have (you did that in the completed accompanying written responses), but should be a macro-level translation of what the respective portraits **really** mean in their entirety.

This formalistic evaluation (which I don't need to see) will lastly be formulated into a piece of critical writing called an artist's statement. **This is the portion of your exam work that I want you to turn in to me.** In this artist's statement, I want you to summarize the evaluation process you undertook previously in a one-page statement of artistic intention. Your response should be no longer than one page in length (single spaced, 12 point serif font only) and should adhere to the following format:

Your name
Artist's Statement

Written response here…

Completing the exam:
You will need to send this statement to me as an attachment (Microsoft Word documents preferred). Additionally, you should display this artist's statement with both works on your Student Homepage