TEACHING AND LEARNING ON-LINE IN IN-SERVICE ART TEACHER EDUCATION: THE OHIO STATE UNIVERSITY EXPERIENCE

DISSERTATION

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By

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This dissertation presents a study of a two-year distance master’s degree program delivered through online web technologies by Department of Art Education at The Ohio State University. The participants were fifteen full-time art teachers and four university art educators. Their virtual interactions were studied, analyzed, and interpreted for their educational significance in online professional development.

Online distance education literature and research has seen a development from the earlier phase of anecdotal accounts, prescriptions, and rather scattered research efforts in the early 90s. Since then it has flourished and grown rapidly to become elaborated and sophisticated in theories and applications. It has re-conceptualized how to go about education that reflects and takes advantage of the uniqueness of the virtual classroom. Within this broader context of online education research, this study situated itself specifically in the overarching sub-domains of online professional development, virtual learning communities, and the new paradigm of online teaching and learning. Each of these sub-domains has its own sub branches of research topics, and I focused on only a few issues in each domain which were relevant to our program purposes and goals.

The web technologies were able to expand the reach of in-service art teacher education to off-campus audience. As a result, the department was able to bring diverse
backgrounds of practicing teachers together to engage in a prolonged professional
development effort. The fifteen online students’ learning and interaction posted in the
online classroom, both as individuals and as a community of learners, was my primary
source of study. I have documented and explored the program results from these three
major issues: 1) development of an online learning community, 2) development of
students’ reflective learning, and 3) applications of web technologies in the online
classroom. Each was discussed in a separate chapter.

Through an ethnographic approach with participant observation, I have identified
and demonstrated different feasible educational opportunities of online professional
development. First of all, the students were able to connect and construct
interrelationship between theory and their daily practice to a deeper level. The online
classroom had made it accessible and relevant for them to undertake such learning.
Secondly, they were able to engage in sustained reflective learning process as a result of
the online participation and community involvement. Third, they were given the
opportunities to become familiar with current online technologies and enhance their
learning. However, teaching and learning in the online classroom posted some tensions
and challenges due to the changing roles of students and instructors in such educational
platform. These issues were discussed. Moreover, the online learning tools used to
facilitate communication and interactivity were not without limitations. As a result,
future efforts and improvements on advancing online teaching and learning are needed to
overcome technically-associated difficulties. Practical issues regarding use of web
technologies in the online classroom and recommendations for implementation were
discussed. Finally, implications regarding art teacher’s online professional development were discussed.
Dedicated to my parents
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CHAPTER 1

INTRODUCTION

1.1 Background: Art teacher education at a distance—New possibilities for professional development

The technological advancements in online network communications of the 90s have allowed new opportunities for distance education. Via the internet, people are able to exchange and retrieve information, data, images, sounds, and video, in real-time streaming fashion. In addition, two-way or multiple channels of communications are available now (Albaloooshi, 2003; Lynch, 2002). One can interact with one or more people through texts, sounds, images, or any combinations of them. That is, one can choose which communication media are of best use in different contexts for different purposes. These changes have provided a new communication platform with more and better options for online teachers and students in a virtual space. Teachers and students can choose when to get connected in individual path and still keep updated. This feature has been called an important catalyst triggering a second revolution in distance education. In general, online communication technologies have brought us “a new generation of
educational multimedia” (Shavinina, 2001) and “a new education framework” (Westera & Sloep, 2001).

Online distance education has been used to address specific needs of teacher education, and it is growing rapidly (Bailey & James, 2002; King, 2002; Mehlinger & Powers, 2002). Online distance technologies can connect teacher practitioners across local and international contexts. It is also widely recognized that today’s teachers need to be able to educate technologically-competent generations (Chuang, 2002; Lowther, Jones & Plants, 2000; La Velle & Nichol, 2000; Mehlinger, & Powers, 2002). They are expected to be familiar with new technologies to enhance instruction. Consequently, enhancing teacher education through and in technology has become an important issue in teacher education.

In terms of in-service teacher education, one of the important features that makes online distance education important is that it is able to facilitate and enhance communities of practitioners regardless space and time limitations. The development of a virtual community for educational purposes offers conventional professional development a new approach. It provides a whole new perspective to look at how teachers can grow professionally. In fact, “teacher preparation programs are beginning to reach out to their graduates who are already teaching to provide support and advice to them during the critical early years of their teaching career (Basinger, 2000)…with online technologies…” (Mehlinger & Powers, 2002, 267). The support that in-service teachers get from online connection with mentors and a professional community to share and reflect about daily practice is both cost-effective and context-sensitive. Many advocates
of teacher education have been trying to develop infrastructure systems that take
advantages of online technologies in in-service professional development (Alexander,

The present study is a study of facilitating professional development for art
teachers through online technologies. Implemented by The Ohio State University from
2002 to 2004 and titled “The Mostly Online Masters’ Program for Practicing Art
Teachers,” it was the first such experiment in the field of art teacher professional
development programs. The focal point was to deliver professional development for art
teachers in a virtual classroom from a distance while they were still teaching in their own
classrooms. For this study very few relevant theories could be located in art education to
guide my inquiry. In the art educational literature, research on facilitating arts learning
through distance education has been relatively undeveloped. Research on art teachers’
professional development through distance education is scarce as well. Therefore,
theories and analytical frameworks from online distance education in other areas of study
were used in this study.

This study investigated specifically the participants’ learning and teaching
interactions that occurred in the online classroom. The online program made possible a
real-time documentation of such activities through text-based postings. These postings
documented the online students’ thinking and were significant enough to illustrate the
advantages of online educational technologies for professional development. The study
did not, however, attempt to assess the quality of the students’ thinking. For example, it
identified episodes of students’ reflecting on their classroom practice but it did not try to assess the depth or even the accuracy of such reflection.

1.2 Introducing the Mostly Online Master’s Program: Content and goals

The mostly online program was launched in the summer of 2002. It brought together several themes that were worth exploring further: in-service teacher’s professional development, the connection of theory and practice, teacher as researcher, building of professional networks, technological applications in education, and learning with technology. This study observed the program through these focuses, documented its results, and offered insights into art teacher education in the age of technological expansion.

The instructors mutually committed to ensure that the quality of the on-line program was no less than that of the regular MA program on-campus. Thanks to the asynchronous feature of online teaching and learning, the program was able to admit a group of practicing teachers with diverse backgrounds. They came from various states in the US (Alaska, California, Missouri, Ohio) and overseas (American schools in Saudi Arabia). This group of fifteen teachers took one online course in each quarter for two years, for a total of eight online courses. After taking the two-year sequence, students were expected to complete a research project relating to their teaching context. It was an action research to apply their online learning by situating theories within individual teacher’s local scenario. It was also a problem-solving project to investigate issues that they had been encountering in schools.
They were also required to meet in person on campus for one week during the first summer beginning the program, the second summer, and the third summer following completion of the online courses. This week-long, in-person meeting proved to be a major catalyst to help building an intimate group. It allowed the members to become personally and emotionally supportive toward each other in the online classroom. This finding confirmed similar research results (Stallings & Koellner-Clark, 2003) that in-person or face-to-face contacts among virtual members are crucial to foster human connections in the virtual learning community.

The program consisted of eight courses focusing on major issues critical to today’s art education. They included current issues, studio methods, criticism, multiculturalism, assessment, and action research. The underlying curriculum philosophy of these courses was to help students to gain insights into their own practice through examining contemporary issues as a professional group. This program had the three following goals:

1. **Promoting teacher’s professional growth in becoming a reflective practitioner.** This means to train teachers within the two-year period of time to acquire habits of continuing reflective thinking about their own practice for sustained professional growth.

2. **Developing a virtual learning community** This means to foster professional exchanges through building an online learning community. They should be able to engage in a professional social network to re-examine practical issues collectively.

3. **Exploring the possibilities of an online masters program in art teacher education and maintaining high quality with intellectual standards.** This means to take advantage of web technologies to train teacher researchers at advanced levels. They should be able to contemplate important problems, consider alternatives, and finding solutions through critical inquiry and action research.
In the online classroom, these full-time teachers were able to participate in online activities “anywhere and anytime”—asynchronously. They valued and appreciated such a flexible educational opportunity. This helped to encourage prolonged engagement in collectively contemplating broader, multicultural, and multilayered educational issues. The shedding of physical boundaries and time restrictions in professional development enabled me to examine closely the lives of a group of art teachers. I could observe such issues as how art teachers dealt with the ever-changing world of the contemporary arts. And how they incorporated it into their teaching; how they were able to apply what they learned in the virtual classroom to their everyday professional situations.

1.3 Professional development and online learning community

There are increasing numbers of online degree programs offered in general education in the US and worldwide. Also, online distance technologies are now popular tools for educating in-service teachers. However, most such programs have focused on the delivery of instructional materials and students’ self-learning. The research community has only begun its initial attempts to address the issues of building a learning community in the virtual classroom in recent years. The interactive dynamics in a productive online learning community is very different from that of a traditional classroom. While research has affirmed that a collaborative teacher network using distance technology is effective in improving individual professional’s practice (Curtin, Cochrane, Avila, Adams, Kasper & Wubbena, 1997), how to foster a learning network/community has been less researched in the teacher education literature. In
literature of traditional professional development, individual’s resulting change was less attended.

In addition, as one of the goals of our program was to promote reflective practitioners, online professional community development could provide new approaches. The distance learning literature has seen very few research efforts invested on promoting teacher thinking through an online professional community (Bailey & James, 2002; Holeton, 1998; Sebba, 1994). Thus, it is important to investigate such dimension of distance professional development, as has recognized by Hartmann & Stephens (2004):

…to provide this necessary professional development in a way that encourages teachers-who spend most of their time in classrooms isolated from one another and from other opportunities for professional growth-to view themselves as lifelong learners. Guskey (1995) argued that teachers themselves must come to view professional development as a process rather than as an event. In order for this to occur, the isolated "in-service days" model of professional development will need to be replaced with a model that continually supports teachers' need for growth. Stein, Silver, and Smith (1998) proposed that teacher development occurs best through the building of communities of collaborative, reflective practitioners. Riel (1996) supported such community building, arguing that through collaborative intellectual exchange teachers can support one another's professional development. If this vision is to be met, professional developers must tackle the difficult task of promoting such professional networking and community building within the limited time that teachers have available in the existing school workplace... (58)

Therefore, because of the significance of building a learning community in the context of online professional development, this study paid special attention to the development of such a community, and examined what it meant and entailed in educating reflective teachers.
1.4 Purpose of the study

In this two-year online program, while the instructors each explored online learning in their own course contexts and were informed about the outcomes of individual courses, they did not explore the students’ ongoing development. The latter demanded rather systematic observations from different standpoints through a structured research process. The large amounts of data posted online as a result of each online course were evidence of student learning. Did they gradually become more reflective about their own practices as a result of this program? What impact did the professional support network have on their practice? The purpose of this study was to examine the educational interactions that occurred and to ask what they meant for art teacher education and online networked professional development.

However, the purpose of this study was not to evaluate the quality of the teaching and learning interactions in the program. It did not try to evaluate the educational outcomes, nor the program implementation and administrative outcomes. Unlike some distance learning research, this study did not seek to establish criteria of quality online teaching and learning experience. Rather, it observed and analyzed the character of online interactions in the program during its experimental phase, and asked what the medium made possible. The overarching research question was what could web technologies offer to enhance or broaden distance professional development, and, consequently, how could web technologies be used to enhance particular kinds of interactions in similar program?
1.5 Brief introduction to the major issues

This section gives some general background to the major issues involved in the program goals including: 1) teacher as a reflective practitioner, 2) situated professional development, 3) professional community building, 4) learning with technologies, and 5) teacher as researcher.

1.5.1 Teaching as a reflective practice

Traditionally, teaching as a profession has often been associated with transmitting knowledge, hence teachers have been regarded as the deliverers of knowledge. This conception assumes that knowledge (or theory) and practice are two different things—knowledge as the official product of academic authorities/institutions and practice as teachers’ agenda of delivery. Teachers are seen as mostly technicians who are not to question the contextual validity of teaching legitimized knowledge. This conception, still common in contemporary educational world, has significantly hindered the connections between theory and practice. Schön (1983) argued that that technical ability has less to do with success of professional practice than reflection. He proposed three major ideas to understand better the complex mechanism of professional practice and to provide a curricular framework for teacher education.

*Reflective practice* is what Schön used to characterize the new conception of professional practice. First of all, he proposed that teachers already have their own understanding about teaching on issues such as what works and what does not in different circumstances. This idea recognizes that teachers are not sole receivers of passed down
theories but active meaning-makers of theories. This is called *knowing-in-action*.

A second idea is called *reflection-in-action*. It refers to teachers’ reflective understanding about their knowing-in-action. When teachers realize that their knowledge about practice is not adequate to solve the problems they face, they sense the needs to act further, either through revising their existing practice or re-considering their theories.

The third idea is called *reflection-on-action* which focuses on deliberate re-evaluation of the professional practice after the event and outside of the teaching context. This involves a greater degree of reflection and change in the teacher’s own professional framework. Reflection on experience of particular events may contribute to a permanent change of their educational philosophy. Building on Schön’s work, Ghaye and Ghaye (1998) expanded this third process on becoming a reflective practitioner, and argued that “this [reflection-on-action] process of the generation of professional knowledge and the improvement of practice, through reflection of one kind or another, can be appropriately described as a research process; the reflective practitioner is a researcher” (p. 5). They called it *reflection-on-practice*.

Clearly, a more constructivist approach to teacher’s professional development has become necessary. It is fair to say that without applying knowledge in context and doing ongoing investigation into one’s own practice, a teacher’s professional growth may be limited. Thus, educating reflective thinking can help to improve teacher practice.
1.5.2 Situated professional development

Schön’s (1983 & 1987) exploration on the nature of professional knowledge and practice has generated many followers and ideas about re-conceptualizing the profession of teaching. For instance, Taggart and Wilson (1998) developed action strategies to promote reflective practice through individual and collaborative action research. Ghaye and Ghaye (1998) established a model for training reflective practice through reflection in four domains: reflection on values, reflection on practice, reflection on improvement, and reflection on context. Sebba (1994) expanded schools’ staff development to become a program of educating reflective practitioners, instead of giving traditional workshops aiming for curriculum development. The most important element in these researchers’ developments is their common emphasis on the contextual factors of practice. The contextual factors are what provide teachers the fundamental framework within which to re-evaluate their practice. The factors include the people (students, teachers, and administrators), values, culture, and environment of the school and its greater community. Examining one’s own practice with considerations of these factors is what situated professional development would entail.

1.5.3 Teacher network and professional community building

Not long ago, a teacher network was not a fashionable concept in educational discussions. The burden of educating students was on the curriculum, rather than the teachers, and ensuring the quality of curriculum was enough. In the school reforms of the late twentieth century, however, teacher’s changing beliefs and practices have come to be
seen as vital to implementing new educational approaches. And one approach to teacher
development is through developing professional networks—a topic currently attracting
research. Adam (2000) defined a teacher network as: “A teacher professional network
consists of the linkages and voluntary, reciprocal interactions among teachers, their
colleagues, and professional referents that are instrumental in shaping teachers’ beliefs,
knowledge, and practice. These linkages may extend only within schools or they may
span schools, districts, levels of government, and professional organizations” (p. 19).

Adams’ research has shown that teacher networks have “enabled teachers to
better manage the context in which they work, gathering time, information, and other
resources within a structure that enhanced collaboration and personal efficacy, allowing
professionally negotiated, hence common, vision of practice” (p. 2). The two important
results of building a teacher network about improving teacher practice, according to
Adam, are motivation and capacity. He has come to conclude that it is only with a
practice-based model of professional development that the bridge between policy, reform,
and teacher implementation can be built.

Reform policies which require teacher’s active participation for success often fail
to bring change in the classroom. In reality, teachers are the one who shape, expand, or
distort the policies. But traditional staff development does not seem to work in preparing
teachers for new educational paradigms. With teacher networks, teachers have the
support group they need to undergo conceptualizations of new paradigms of thinking.
When they need to reflect issues, they have a professional community that shares the
common values and similar goals. When they feel emotionally challenged, someone is
there to listen to their complaints and offer suggestions. With a teacher network without physical boundaries, the professional discourse becomes not only sensitive to individual situations, but also embracive of larger contexts and perspectives.

Nevertheless, it is not an easy task to build a successful teacher network for professional support and growth. Because “teachers have not yet developed a tradition of sharing their own expertise among themselves, though networks play a major role in providing opportunities for teachers to validate both teacher knowledge and teacher inquiry,” said Lieberman and Grolnick (1998). Therefore, how to facilitate an effective teacher network and what are its characteristics are the key questions in examining teacher networks as an approach to professional development.

1.5.4 Learning with technologies

The late twentieth century saw a dramatic acceleration of the use of computer technologies in schools. One of its important roles in education is enhancing distance education. “In many ways, computer technology appears to be a boom to distance education,” said Cavanaugh, Ellerman, Oddson, & Young (2001, p.67). The next wave of innovation of computer technologies—the birth of the Internet for public use—has broadened the horizon of traditional distance education which previously focused on delivery of instructional materials. Teachers were previously seen the experts in content knowledge and students were to master the knowledge given to them. Instruction was often delivered one-way only in broadcasting and audio-video technologies. With the arrival of the Internet in the late 90s, the relationship between the teacher and the students...
changed: technologies have made two-way digital communication possible that is interactive in real-time mode. Geographic and time limits no longer exist for this technology. One can teach virtually anyone about anything in the electronic world, and students from different parts of earth can sit in the same virtual classroom. This is a major leap in distance education. With this Internet technology, it has also become possible to examine closely the individual and collective outcomes of student learning beyond pre-set curricular objectives. Students’ learning becomes central and teachers become facilitators rather than knowledge deliverers. For example, students’ online discussion and interaction become important in distance education.

In other words, the dynamics of learning have changed in an online environment. This creates new challenges for both teachers and students. “The key features of online learning—time-independent, text format, computer mediation, multiple threads of conversation, and fluid participation patterns—pose particular kinds of challenge,” said Gunawardena (2001, p. 115). As a teacher of online learning, Gunawardena also acknowledged that “for me the greatest value of online learning lies in the concept of networked learning, the opportunity to engage in collaborative, reflective learning for an extended period with individuals who may be thousands of miles apart and in different time zones” (p. 115). For Gunawardena, online teaching has expanded his possibilities to reach a broader community of learners.

More and more teachers of online education are adjusting themselves to meet these new challenges. An instructor reflected on her changes as she shifted to become an online mediator. Her words reveal that online teaching is more than putting course
It is obvious that teachers need to make their teaching style and expectations context-sensitive to the online environment. How much and in what ways are important issues to consider.

Student development is a relatively new area of discussion in contemporary distance education. The available technologies have enabled more flexibility for individual students and optimized their possible learning results. Instructors are able to give special attention and timely feedback to individual student, through tools such as e-mail, threaded discussion, and chat rooms, for example. On the other hand, in an online learning environment, the individual student is expected to play a supportive role to the online learning community, which demands social engagement and culture building similar to a regular community. Although individual students are isolated geographically from each other, each contributes to the construction of the online community, socially, culturally, and intellectually. As a result, student development in online learning is not limited to their engagement with course materials. Rather, it encompasses personal, social and community experiences, which are to some extent related to their total learning...
experience. The characteristics of successful online experience—being assertive, independent, self-motivated, self-disciplined, and persistent—also make learning different for students.

1.5.5 Teacher as researcher

To characterize the long-term problem of teacher education, Korthagen (2001) argued that the gap between theory and practice is the major obstacle. The causes for this are more than one. Some say that theory taught in pre-service teacher education institutions was not dealt with in realistic teaching contexts which then hinder teachers’ ability to apply theory meaningfully. Some say that pre-service teachers did not learn well how to reflect on their teaching once they are in classroom. They argue for the idea of teachers becoming a researcher in their own classroom contexts. Action research, which grows out of one’s recognition of teaching problems and his/her effort to find possible solutions, is often the methodology being used. To many teacher education reformers, this appears to be a good way to improve teaching. Action research enables teachers to closely investigate issues through an integrated examination of theory and critical analysis in a very focused approach. It seems to be a constructive way to help teachers articulate their own problems, ponder the difficulties, and find and evaluate workable solutions. Consequently, action research, grounded in a reflective philosophy, has come to be recognized as one of the most important paths to teacher development.
1.6 Orientation and organization of the study

Within this decade, research in online distance education has expended into a vast body of sub-domains to address the complexity and multilayered technology-enhanced learning. Topics worth investigating are virtually endless. To name a few, there is research on the effects of different technological approaches on learning (Conole, Dyke, Oliver, & Seale, 2004), collaborative knowledge construction in online classroom (Hmelo-Silver, 2003; Hubscher-Younger & Narayanan, 2003; Girardeau, Hundhausen, & Suthers, 2003), theoretical frameworks for e-learning (Nulden, 2001), online course design and pedagogy (Koehler, Mishra, Hershey, & Peruski, 2004), individual learner development (Baldwin & Sabry, 2003), and virtual community interaction (Henri & Pudelko, 2003). The list goes on.

From an implementation’s point of view, our online program touched all the above issues. However, to maintain an analytic focus, I concentrated on professional development, both individually and collectively. Specifically, how the professional learning could inform and revitalize individuals’ ongoing practices; also, how the collective community development could help individual learning. Moreover, what the online technologies could offer in facilitating such learning was also focused.

Researchers of online professional development, such as Gray and Tatar (2004), focused on the development of the personal, interpersonal, community, and technological aspects of teachers’ growth. Others such as Fusco and Schlager (2004) and Barab et al (2004) focused on how technology can be used to form and support communities of practice. For the current study, I focused on the topics that are of immediate value for
improving the design and implementation of this program. The following chapters will cover these topics:

Chapter 2: Methodology
—Discussion of the researcher’s role, and the inquiry process

Chapter 3: The online learning community
—Discussion of the characteristics of learning communities with supporting evidence

Chapter 4: Educating reflective art teacher practitioners
—Discussion of different perspectives on reflective learning as evidenced in coursework and community activities

Chapter 5: On use of web technologies
—Discussion of the web technologies used in the program and participants’ experience in learning with technologies

Chapter 6: Summary and implications for in-service art teacher education
CHAPTER 2

METHODOLOGY

2.1 The underlying research positions

2.1.1 An interpretive study

My main research goal was to investigate a particular online community’s learning interactions and the meanings behind them. The main focus was on the educational possibilities that web technologies offered in facilitating online professional development. It was an ethnographic study of the community’s cultural process and interactive patterns, and of members’ behaviors. Their educational experiences were of interest to my study. In terms of my approach to investigation, this was an interpretive, reflective, and context-sensitive inquiry. This means that others may interpret the data differently than I did. My inquiry was not a quest for true-or-false answers about the students’ experience. Nor was it a quality report on their subsequent performance in real-life classroom practice. Rather, the educational implications and their significance were of concern. The interpretations presented in the study were my current understanding of the online program at the time of its completion after two years.

My relationship to the program as a researcher was shaped and depended on the
three different roles I played in the program: 1) I helped in the online course designing process, 2) I served as the online course technical assistant, and 3) I observed the program development from its debut till its end as a participant observer. My first role enabled my understanding of the contexts where the online courses were designed and developed. My second role enabled my close and continuous social interactions with the online students. And my third role enabled my broader examination of the program implementation and students’ online learning process as they developed from its beginning to the end.

These three roles played important parts in my reading, analyzing, and interpreting of the research. In particular, my role as the program observer informed me in overseeing every student’s two-year long-term growth and change. I tried to reflect the reality of the implementation as I saw it from the observer’s perspective. This role of program observer shaped my presenting of significant findings. Therefore, my research went beyond collecting what people said. The exercise of judgment and my subjectivity in reading the primary data cannot be overlooked. As Schweizer (1998) has said, the nature of anthropological knowledge always involves subjectivity in interpretation:

Neither naturalistic descriptions of ethnographic experiences grounded in open-ended interviewing and participant observation nor the results of systematic interviewing based on pile sorts or triad tests, for example, capture reality in raw condition. Some selection, some reactivity, and some interpretation based on previous preconceptions are always part and parcel of data collection and analysis. (54)

The point is, my understanding of the program was constructed knowing that there was no one single true version of story. As a researcher trying to weave the story of
implementation from a tremendous load of data pieces, I tried to balance what I saw as significant with what the online students raised.

2.2 Research framework of an ethnographic participant observation case study

According to Atkinson & Hammersley (1998), the essential features of an ethnographic research include the following:

- a strong emphasis on exploring the nature of particular social phenomena, rather than setting out to test hypotheses about them.
- a tendency to work primarily with ‘unstructured’ data, that is, data that have not been coded at the point of data collection in terms of a closed set of analytic categories.
- investigation of a small number of cases, perhaps just one case, in detail.
- analysis of data that involves explicit interpretation of the meanings and functions of human actions, the product of which mainly takes the form of verbal descriptions and explanations…” (p. 110-1)

These features describe my study: I examined the learning taking place online of a specific group—including fifteen students and four instructors. I observed the interactions among people and made interpretative analysis about the significance of the learning patterns involved.

The original data included posted online course activities, student works and responses, and their community interactions. The data were organized in terms of each course. This did not serve well my research purposes. Consequently, I had to reorganize the data into different sets which were related to the questions I asked. I used four different dimensions as organizing themes for this: 1) development of the online learning community, 2) development of students’ reflective learning, and 3) use of web technologies. These three dimensions form the main topics discussed in the three
chapters that follow this methodology chapter.

In addition to students’ learning and performance in each online course, I looked for qualitative changes taking place over the two-year duration of the program. While the program activities were organized around each course for each quarter—a three-month period—I expanded the scope of my observation to the length of the whole program. This allowed me to observe and interpret changes occurring over the two years. This was to observe the big picture of the group’s development and its growth. I had also come to understand each student’s change as I compared his/her learning from course to course.

2.2.1 The presence of the researcher as a participant observer

As for my presence as the researcher, I saw myself as a participant observer. The literature of ethnographic research has multiple views of the effect of the presence of the researcher in the community at study. Although I was not enrolled in the program, I was involved through the three roles mentioned previously, which allowed me to understand the data in the context they were created. As a researcher, I recognized and valued my social participation in this group. Atkinson & Hammersley argue that the researcher observer can not exclude himself/herself from the social group he/she is studying. They say:

… in a sense all social research is a form of participant observation, because we cannot study the social world without being part of it (Hammersley & Atkinson, 1983). From this point of view participant observation is not a particular research technique but a mode of being-in-the-world characteristic of researchers. Both ethnography and participant observation have been claimed to represent a uniquely humanistic, interpretive approach, as opposed to supposedly ‘scientific’ and ‘positivist’ positions. (p. 110-1)
In my three roles, I collaborated with instructors in developing the online courses, helped to manage the technical aspects of the program, and assisted students in solving technical problems. These roles resulted in the participants’ acceptance of my role as the researcher. This made my trusting interaction with my subjects possible, and enhanced my social involvement and access to them as a participant observer. Nevertheless, although I was part of the social group, my contribution to the interactions was very limited and was insignificant enough to let me stay as an observer only.

My social relationship with the students as an assistance provider had significant function in my data collection process. I was able to elicit more honest responses from the students when conducting research activities such as surveying the members’ program experiences, and establishing personal correspondences for further inquiry and clarification. Therefore, my personal involvement in the community helped me during the process of reading and interpretation. The resistance to outside observation, which is commonly documented in participant observational studies, was not a problem during my research process. As a result, I was able to cross-checked my analysis in light of the perspectives they offered me.

In summary, I saw myself as emotionally participating in the social group as a technical assistant, and intellectually through my understanding of the content materials presented online. As a research in the same field of art education, I was able to see the significant learning behaviors of the participants on their interactions with content materials. In addition, my subjectivity in analysis was grounded partly on participants’ inputs and remarks, so I was able to maintain a balance between what I saw and what
they saw. Yet, I was able to remain on the sideline to observe the evolution of the program.

2.2.2 Participants of the study

The participants in this study included the fifteen full-time art teachers and four professors who taught one or more courses in the eight-course program. The fifteen art teachers came from Ohio, Missouri, California, Alaska, and Saudi Arabia. Their age were from 20s to 60s and had an average of 11 years of teaching experience from 4 years the least to 20 years the most. Three are male and the rest of them are female. Their grade levels ranged from kindergarten to high school. They were referred as online students in this research.

The four professors were in their 50s and 60s and had an average of 27-30 years of teaching experience. Two are male and two are female. Prior to the online program development, they had all taught same course content and subject matter in regular face-to-face version for many years on campus. They were referred as online instructors in this research. The online instructor in online classroom carried a more supporting role, rather than a deliverer of instructions as in its regular sense.

Each of the fifteen students and four instructors was assigned an alphabetical letter when I reorganized the initial data. When their works or postings were quoted, the letter code was used rather than their names to ensure confidentiality.
2.2.3 Design of the research

The design of the research was to: 1) read every bit of online data available in the eight online course websites, 2) study and reorganize the data based on my three proposed dimensions of inquiry, and 3) interpret the meanings and significance behind the data. The collection of data and my analysis of them did not follow a fixed sequence. There were times when I needed to revisit the data to answer certain questions; and, there were also times when I revised my analysis in light of further development of data.

2.2.4 Locations of research

The locations were where the actions of the social group took place: it included the virtual spaces in which all exchanges of student works and written conversations were posted and recorded in public. My private correspondences with the students were also included. However, the private space where students corresponded directly with their classmates and instructors in the electronic mailbox in WebCT (Web-based Course Tools) was not included for privacy reason.

In addition, more than one research site was involved. Since course activities took place in a course-by-course fashion, each online course was a micro research site, and there were eight courses in total, which made eight micro sites for my research purpose. The physical location of the research where the information was stored was the WebCT server implemented by Office of Technology at The Ohio State University. Another web server was in ACCAD (Advanced Computing Center for the Arts and Design at The Ohio State University) where the art criticism course was hosted.
2.3 Method of data collection

These were four different sources of data collected:

A. All postings in the eight online course sites, including records of communications in discussion board, online student projects, and assignments.
B. Survey results from the fifteen students’ response, and my follow-up email correspondences with individual students; survey results from the four instructors and my personal communications with them.
C. My observation fieldnotes on class interactions and community development.
D. My reflective journals in which my own thoughts and reflections were recorded.

Every piece of the discussion postings, and student works and assignments that were produced in the eight course sites was assigned with a systematically-created code like “Message Id: W2-205DJ.” The combination of numeric and letter codes indicated when, where, and by whom the piece was produced, and this system remained anonymous to others. With this systematic coding attached to the raw data, I could easily identify the original context of each piece of data when undergoing analysis. Otherwise, with such a rich body of bits of information produced within the two years, one could easily become overwhelmed.

A four-page questionnaire and follow-up email correspondences were used as survey instruments to provide a picture of the fifteen students’ learning experience from their own perspective. A similar format of survey was sent to the four online instructors to ask for their perspectives of program experience pertaining to online teaching.

The data collected were studied and categorized into these three dimensions of inquiry previously indicated:

1. Development of the virtual learning community: characteristics and dynamics of online interactions; and the social aspects of students’ program involvement.
2. Development of reflective thinking and learning: students’ professional growth and change as a result of the program participation.

3. Examination of use of web technologies: what was learned on the educational impact of web technologies and the problems or challenged found in the online classroom.

My reason to examine these three particular issues, instead of others, was because they were most relevant to our initial program purposes and goals. That is, our program was experimenting with the possibilities of building a virtual professional community that was educational, promoting teacher’s reflective learning, and exploring educational potentials of web technologies. The interconnectedness of these three issues was also of concern in this study. For that, from an implementation’s point of view, they played important roles in facilitating such program. For instance, web technologies facilitated community-building and reflective learning, and, social community facilitated active learning process, etc.

2.4 Method of data analysis

The first stage of data analysis was to re-organize data that were taken out of their original contexts. When reading the raw data as they were generated in original course and assignment contexts, I identified their relevance to any of the three proposed dimensions of inquiry. In other words, I situated the unstructured data in the contexts of my inquiry, contemplated their meanings, and explained the significance of the phenomena.

When sifting through the rather large data pool and constructing the meanings behind data, I needed to interpret their relevance to what I wanted to investigate. The
dimension of technological applications required least interpretation and was less difficult
to sort out relevant data. Most of the data I collected on this dimension was from
participants’ comments and my personal communications with them. This kind of data
occurred less in the online discussion board.

The dimensions of community development and reflective learning required more
interpretation. The discussion board was where these two kinds of data occurred most of
the time. Reflective learning occurred almost always in students’ assignment postings
and term projects. To remain focused on the research questions asked, I used only two
categories to process the raw data. They were the relevance of postings to issues of
community and reflection. For example, an assignment posting could be indicative of
community-building in learning activities, and of an individual’s reflective activities
simultaneously. It occurred very often that a piece of data overlapped both categories. In
such cases, the posting was placed under both. It was also possible that their degree of
relevancy differed, such as where the relevancy to one category was less than to the other.
Consequently, giving an actual number of postings in each category in each course site
was difficult and of less importance than relevance. What was more significant was the
approximate percentage of postings in one or both categories as compared to the total
number of postings in a given course. This is explained further.

There were many variables affecting the resultant number of postings in a given
course context. This means that percentages can give a better sense of the learning
activities than the actual number of postings. The total number of postings generated in a
course was anywhere from 269, the least in the beginning course, to 982, the most in the
multicultural course. The other courses had an average of about 600 postings including both discussion activities and assignments postings. After my data processing in the first stage, I compiled those that matched the two categories of community-building and reflective learning. At this stage, the number I dealt with was approximately from 75 percent to 90 percent of the total postings in a given course. In other words, about 10 to 25 percent of total postings in a given course was considered social chatting and therefore excluded at the first stage. Therefore, during this second stage of data analysis, I had in hand approximately 3700 postings in the eight courses after two years that were in either the community or the reflective category or both. The number of data in community category was about one-third of the amount in the reflective category. I then contemplated the emerging issues by reconstructing this pool of secondary data for their educational significance. Examples cited in later chapters were drawn from this pool of secondary data.

In terms of my overall data-reading and meaning-constructing, the analytic methods proposed by Huberman & Miles (1994) offered a set of practical procedures for me to follow. My procedures of analysis generally matched these steps:

- Affixing codes to a set of field notes drawn from observations or interviews
- Noting reflections or other remarks in the margins
- Sorting and sifting through these materials to identify similar phrases, relationships between variables, patterns, themes, distinct differences between subgroups, and common sequences
- Isolating these patterns and processes, commonalities and differences, and taking them out to the field in the next wave of data collection
- Gradually elaborating a small set of generalizations that cover the consistencies discerned in the database
- Confronting those generalizations with a formalized body of knowledge in the form of constructs or theories (9)
2.5 Establishing trustworthiness of the interpretations

According to Guba and Lincoln (1985), researchers who are involved in observations often confront issues of trustworthiness in their interpretation of the data. To establish the interpreter’s credibility in analysis is a critical necessity. They identified criteria for establishing credibility, including prolonged engagement, triangulation, and peer debriefing. I employed these three in my study to ensure my judgments were sound.

Prolonged engagement “is the investment of sufficient time to achieve certain purposes: learning the ‘culture,’ testing for misinformation introduced by distortions either of the self or of the respondents, and building trust” (p. 301). Engagement refers to the researcher’s involvement with the site and his/her thorough understanding of the culture/context in research. In this study, my observation began from the initial conception of the online program till the end of its actual implementation after two years. This two-year period was long enough for me to conduct credible investigations. My engagement with the program as a co-designer of online courses, a technical assistant, and a researcher enabled me to gain close observation in a committed fashion. I was able to situate each student’s course performance from a broader perspective, and monitor their individual change closely.

Triangulation refers to using several different sources of data, methods of data collection, theories, or investigators involved in a research. In my study, I employed multiple sources to collect data: online course postings, students’ and instructors’ surveys, my fieldnotes of observation, and my reflections as a program monitor. I compared these
different sources of data against each other to check for interrelationships, conflicts, and consistency. And through comparisons of data from the micro- and macro perspectives, I was able to ensure the presentation of different voices and concerns, and examine meanings from multiple points of view.

Peer debriefing is a process to ensure that interpretations are justified in the eyes of credible peers. Guba and Lincoln said:

> It [peer debriefing] “helps keep the inquirer ‘honest,’ exposing him or her to searching questions by an protagonist… The inquirer’s biases are probed, meanings explored, the basis for interpretations clarified. All questions are in order during a debriefing, whether they pertain to substantive, methodological, legal, ethical, or any other relevant matters. The task of the debriefer is to be sure that the investigator is as fully aware of his or her posture and process as possible. (308)

The members serving as the debriefing purpose in this study were three members of my dissertation research committee: Dr. Terry Barrett, Dr. Michael Parsons, and Dr. Sydney Walker. They have taught one or two online courses in this program and were also members of the Online Program Committee. These three members were able to validate my analysis and judgment with insider knowledge and first-hand experience, as they were the main forces behind the design and implementation of this online program. They were my mentors to challenges my biases, deepen my inquiry, consider my arguments, and test my judgments.
3.1 Prologue

An online classroom differs from a conventional classroom because there are no physical features such as classroom walls, blackboard, lecturing platform, and chairs. These physical attributes of a conventional classroom, which have shaped the conventionally-agreed behaviors of teaching and learning, are absent from the online environment. As a result, online classroom life occurs on new grounds. Classroom norms, acceptable social behaviors, and members’ expectations are established without voices, gestures, body language, and speech cues. This chapter examines how the online learners constructed their community life online; and how people adjusted their roles as teacher and student and tried to work on what was possible in the virtual classroom. Following the review of literature on virtual learning communities are discussions of findings on this topic.
3.2 Researching virtual community in distance learning

3.2.1 What is virtual community in education?

The concept of a virtual community stems from the common concept of community. As a generic term, community refers to a group of people who have the same geographic, ethnic, religious, social, political, or cultural backgrounds who share common cultural, social, economic, political, or educational interests. The Internet revolution has made possible a kind of virtual community which connects people from different locations who have common interests in mind. A major kind of virtual community nowadays is educational. An educational virtual community is one in which members interact with each other through explorations of ideas, and develop a set of shared cultural and social norms in the process. Collaborative and shared learning is often the primary goal of an educational virtual community, and this goal provides the underlying codes for interactive behaviors in the virtual space. Therefore, such virtual community is often called virtual learning community or online learning community. These two terms were used interchangeably in this study. In general, when the term “virtual community” was used, it was my attempt to emphasize its virtual connection. When the term “online community” was used, I was using it more as a generic description of the electronic class community.

3.2.2 The community process of virtual learning community

Since a virtual learning community aims at learning development, its community process and socialization should be seen as a means to an end. In this study, the social
dimensions of community development were analyzed in relation to facilitating and enriching learning. My position is that of Henri and Pudelko (2003), for whom studying the characteristics of socialization processes in developing an educational virtual community was a central focus. They said:

…Virtual communities exist and play a socialization role to the same extent as ‘real’ communities do (Rheingold, 1993; Lévy, 2000). They carry values of an ideally harmonious society. From an educational perspective, research on virtual learning communities is polarized around two positions. Some question the validity of the notion of a virtual community (Hung & Chen, 2002) whereas others, without questioning it, investigate its pedagogical potential and implementation. The activity of virtual participants in communities is sometimes described in terms of formal or informal learning (Trentin, 2001) or of socialization or professional identity development (Gordin et al., 1996), and learning may be regarded as a by-product of activity (Nichani & Hung, 2002)… …A framework should help to recognize the characteristics and the diversity of virtual communities, to grasp the process underlying their activity and to better evaluate the different types of learning they induce… (474-475)

As Henri and Pudelko said, researching the socialization process of a virtual learning community can inform us how it affected learning outcomes and other pedagogical implications. This is the major purpose of this chapter.

So how does a virtual learning community’s community process manifest itself?

Palloff and Pratt’s (1999) said it this way:

… geographically disconnected people becoming ‘connected’ in a community with several purposes but a shared interest.’ How connected were all of us as instructors and learners? We essentially conversed in ways we may not have tried before. As instructors, we interacted as peers, sharing information of a more personal nature than we might have in a face-to-face classroom. Our participants felt free to discuss ongoing life issues such as job and relationship difficulties, birth and death. We did not have to worry about how we looked or how we were dressed. We connected, nonetheless, around common interests and a common subject matter, which we explored together… (23)

From this perspective, the community process manifests itself through each individual
member’s on-line exploration of their life experiences and realities. Individuals must feel free to bring their personal meanings to the community and construct a community culture with other members. The community process in the virtual classroom is a collective effort in which individual contexts are relevant and significant.

Educationally speaking, Palloff and Pratt said that members need to feel socially connected in order to engage in the community process:

…As norms would be negotiated in a face-to-face group or community, the same needs to occur online. In fact, in the online environment, those collaboratively negotiated norms are probably even more critical as they form the foundation on which the community is built. Agreement about how a group will interact and what the goals are can help move that group forward. In a face-to-face group, assumptions are made but not necessarily discussed… In an online group, we can make no assumptions about norms because we can not see each other… (23)

In this process of developing social connection, members need to negotiate and agree on assumptions of accepted proper social behaviors. This enables members to feel comfortable and have less fear in connecting with each other in the virtual space. To Palloff and Pratt, an important condition of a productive virtual learning community is its ability to build its own interactive grounds. High quality of social negotiation is an underlying strength creating the vitality of community life in virtual classroom.

Palloff and Pratt also stressed the group members’ longing for connectedness and their willingness to work through conflicts as critical in building a virtual learning community. Group development and its behavioral characteristics are so important that they are linked to the success of distance education in general. They argued:

The learning community is the vehicle through which learning occurs online. Members depend on each other to achieve learning outcomes for the course. If a participant logs on to a course site and there has been no activity on it for several days, he or she may become discouraged or feel a sense of abandonment—like being the only student to show up for class when even the instructor is absent.
Without the support and participation of a learning community, there is no online course. (29)

The development of a virtual learning community can be a time-consuming process, because virtually all communications and negotiations are done through text and text only. At times, the back-and-forth textual flow can stop, or idle—to use a computer term—and it may take time to resolve conflicts or different opinions. On the other hand, communication can flow freely and group members feel socially and intellectually connected and develop a sense of community support to keep their learning going. As Palloff and Pratt contended, “It is the development of a strong learning community and not just a social community that is the distinguishing feature of computer-mediated distance learning” (p.32). Thus, if collaborative learning is valued as an important goal, then developing a social bond can be seen as a prerequisite.

3.2.3 Social engagement leads to intellectual engagement in the virtual learning community

To understand further how socialization process helps to facilitate learning, we need to look at the literature on learning communities. Harasim (2002) argued that “The Internet...has triggered an educational paradigm shift as the importance of social interaction, collaborative learning, and learning communities comes to the forefront of educational endeavors” (p. 182). His view represents a major position in online education research and practice today—social interactivity is important to foster learning. Social interactivity can be referred to as the level and effectiveness of social interaction in
an online learning community. This can be understood from two different dimensions: 1) building social connectedness, bonding, and learner’s intrinsic motivation, and 2) facilitating collective knowledge negotiation and construction. These two dimensions are discussed next.

3.2.3.1 Building social connectedness, and learner’s intrinsic motivation

The importance of social connectedness has been a major topic in the literature on learning communities. Levine and Shapiro (1999) advocate a socially-connected learning community, particularly in higher education. They aimed to build a higher education culture on-campus that was learner-oriented and responsive to student learning. The underlying philosophy was that productive learning is optimized in socially and culturally connected communities. They envisioned:

At their best, learning communities generate their own synergy, creating a campus culture where the whole is greater than the sum of the parts. Learning communities create opportunities for greater faculty-student interaction, build on the strengths of interdisciplinary curricular, foster collaboration between academic affairs and student affairs, and generally provide creative space for thoughtful members of the college community to work together. They do this by bringing together different units of the campus that have separate and distinct missions. (43)

Therefore, for Levine and Shapiro, a responsive social and cultural base was a key to a learning community’s intellectual engagement.

On a physical campus, social and cultural bonds are important, and not surprisingly, it is more so in a virtual campus. Strong social connections can foster online learner’s motivation. Motivation has been documented as a more critical factor in online learning than in traditional learning. Lack of motivation often triggers a higher
drop-out rate in online learning than in traditional learning (Duchastel, 1997). And social bonds can contribute to students’ motivation for both individual and collaborative learning. Duchastel states:

Intrinsically motivated action, including that which is focused on learning, is undertaken out of interest (Deci, 1995). Students can and do engage in learning activities for extrinsic motivates as well (self-esteem, family favor, the promise of future rewards, etc.), but it is generally recognized that intrinsic motivation is far superior, for it deals with the inherent topic of learning… (179)

In an online learning community which was formed merely on the basis of enrollment and without social bonding, students’ learning activities would stay in individual-to-content interactions only.

From our program experience, the students developed initial motivation for learning in the first on-campus meetings and online course, in part because of the faculty’s warmness and enthusiasm. But their motivation for learning together as a group was strengthened after they came to develop respect, trust, and openness for the professional inputs and diversity of this group. These characteristics of positive attitudes toward a social community are no different from those in a strong traditional community. An accelerated sense of motivation for learning was seen in the second course. This strong social development later contributed to productive learning in the courses to come.

3.2.3.2 Facilitating social cognition

One could also examine the relationship between social development and intellectual engagement from a social cognitive perspective. For instance, Polin and Riel (2004) pointed out:

Over the past three decades, learning theory has evolved from a cognitive theory
of acquisition of knowledge to a social theory of increased participation in activity (Bruner, 1973; Cole, 1988; Lave, 1988; Mehan, 1983; Norman, 1980; Rogoff, 1994; Wertsch, 1997). A social view of learning adopts a system or network view of interaction and activity. Intellectual development becomes a process of negotiation of meaning in everyday practice with others (Dewey, 1916; Vygotsky, 1978). Learning occurs through engagement in authentic experiences involving the active manipulation and experimentation with ideas and artifacts—rather than through accumulation of static knowledge (Bruner, 1973; Cole, 1988; Dewey, 1916). While it may appear that some learning is an individual accomplishment, in fact, even when ‘alone’ the individual relies upon and is influenced by socio-cultural tools, signs, and symbols to make sense and produce work. …People co-construct knowledge by building on the ideas and practices of group members… (17)

Polin and Riel theorized the social cognitive aspect of learning communities as three distinct but overlapping types—1) task-based learning communities, 2) practice-based learning communities, and 3) knowledge-based learning communities:

**Task-based learning communities** are groups of people organized around a task who work intently together for a specified period of time to produce a product. While the specific group may not, in the strictest sense, share all of the properties of a community, the people who participate in them often experience a strong sense of identification with their partners, the task, and the organization that supports them…

**Practice-based learning communities** are larger group with shared goals that offer their members richly contextualized and supported arenas for learning… The term community of practice (Lave & Wenger, 1991) was created to provide a way of talking about the institutional and interpersonal activities that unit groups of people who are engaged in the same occupation or career.

**Knowledge-based learning communities** often share many of the features of a community of practice but focus on the deliberate and formal production of external knowledge about the practice. Where a community of practice might rely on ongoing participation of members to transmit embodied knowledge, knowledge-building learning communities have made the overt commitment to record and share knowledge outside of its immediate use or active context. (20-21)

All these models match the nature of our online program. First, it was a task-based learning community, because the online courses were designed to set a variety of tasks
related to the examination of current art educational issues and student’s daily practice. The tasks were vehicles for the students to make meaningful connections between individual and broader contexts. Secondly, it was a practice-based learning community, because the course assignments and activities were designed to make students re-consider their practice. In addition, the online instructors tried to give support that was relevant to individual students’ practice. Third, it was a knowledge-based learning community, because it was designed to allow collective contemplation of formalized knowledge about instruction, student learning, and content understanding in art education. And it was hoped that the students would gain deeper understanding and critical perspectives through the online community discourse. These three functions of the learning community were exemplified in our online postings which were records of the community’s intellectual engagement. These three community models on social cognition make clear that students’ creation, construction, reflection, and evaluation of knowledge, and one’s own and others’ learning are interconnected. This framework of facilitating social cognition also promotes higher social interactivity at the same time.

3.2.4 Social bonding and social cognitive interaction as two major dimensions of online professional development

In a context where learning community is in the service of facilitating professional development, the social interactivity becomes more significant. If speaking from this dimension, social bonding and social cognitive interaction are two major factors came into play. Palloff and Pratt (2001) argued that members become more reflective of
their own learning as a result of social engagement and interaction. They said:

In a collaborative learning environment, learning and learning outcomes are much more than simple acquisition of knowledge. The co-creation of meaning and knowledge that can occur in the collaborative online classroom can serve to create a level of reflection that results in what is called transformative learning. In transformative learning, students are able to begin to reflect on the following question: How am I growing and changing as a learner and as a person through my involvement in this course… (83)

Palloff and Pratt stressed that it was only through this type of online facilitation that collaborative and reflective learning could take place and lead to effective online learning. That is, social interactivity contributed to collaborative learning. They said:

Collaborative learning processes help students to achieve deeper levels of knowledge generation through the creation of the shared goals, shared exploration, and a shared process of meaning-making… [It] promotes initiative, creativity, and the development of critical thinking skills. Engagement in a collaborative learning process forms the foundation of a learning community… (32-33)

My observation of program development seemed to support their argument. Comparing students’ postings from the first course to the latest course, I saw a general growing pattern of more frequent references of the personal and professional self as students carried content discussions. It seemed that projecting one’s self onto content discussions in order to illustrate one’s points can be seen as indicators of high social interactivity. In such circumstances, I could sense that content discussions were often deeper on this ground of higher social interactivity. The online learning community seemed to become more intellectually productive after social interactivity reached certain level of maturation and acceptance.

In a context of professional development, high social interactivity and social cognitive interaction can further participating teachers’ degree of reflective learning. As
a result, this reflective learning becomes the bridge through which they translate their learning in professional development setting to their own classroom practice. A group of different researchers claimed similar position on such dimension. But they came from a slightly different angle of fostering engagement in professional development—social trusting. They asserted that for professional practitioners, social trusting is important for engaging in reflective group learning. Ghere et al (2001) summarized these common positions and said:

The quality of relationships is a key determinant of the quality of reflection and the potential for learning (Ellinor & Gerard, 1998; Wheatley, 1992). Relationships influence the emotion with which one approaches reflection, and emotion controls the gateway to learning (Wolde, 1997)… ‘Trust is perhaps the essential condition needed to foster reflective practice in any environment. If the reflective process is going to flourish in an organizational setting, the participants must be confident that the information they disclose will not be used against them—in subtle or not so subtle ways’ (Osterman & Kottkamp, 1993, p. 45). Recent research offers supporting evidence that trust is an important requisite for reflection and learning together. For example, a study of professional community in 248 elementary schools found that ‘by far, the strongest facilitator of professional community is social trust among faculty members. When teachers trust and respect each other, a powerful social resources is available for supporting collaboration, reflective dialogue, and deprivatization characteristics of professional community’ (Bryk, Camburn, & Louis, 1999, 767)… (23-24)

The trusting relationship of a learning community is the manifestations of social bonding and high level of social interactivity. As argued before, in a virtual contest, these were all the more important.

The online program result had evidenced this argument. With the endless possible interpretations of muted online textual communication—without voice and body language to aid in meaning-making—it can take time and effort to understand a person’s intent. A social trusting was therefore important to undergo such communication. Once
the virtual community was warmed up—that is, support for each other’s learning and trust was established, the intellectual exchanges could be more productive. On this trust-building, participants had commented that the summer meeting of face-to-face interaction made a major difference. This meeting gave them opportunity to interact with each other on social and personal level, and develop sense of security on communicating and revealing one’s thoughts in the online learning community.

3.3 Questions guiding my inquiry

When I began my examination of the online learning community’s development and characteristics, both social and intellectual, the following questions were used to guide my observation and data analysis. For the instructors, I looked at their mentoring strategies relevant to community building that were different from their classroom presence. Based on their online written communications, I contemplated their adaptation to new roles in the online teaching environment. For the students, I looked at the data for patterns in two different categories, the social and intellectual levels of interaction, as the major manifestation of the life of this virtual community. Below are some sub-questions that I kept in mind during the data analysis.

1. Instructors’ roles in the online community: What were the changes adopted to accommodate to the virtual classroom?
   —Was their social presence as an online instructor different from the face-to-face classroom?
   —Did they have different expectations for the online students, compared to face-to-face students?
   —Did they try different approaches to encourage culture-building in online classroom?
   —How did they set up intellectual standards in online classroom?
2. Social level of students’ community interaction: What were the patterns of participation on-line?
   —Did particular students dominate the interaction?
   —Were there silent students? Or were there shifts of leadership in interaction at different times and in different situations (topics of discussion, e.g.)?
   —Were there small groups that intentionally excluded the others?
   —What roles did the students play toward each other? Did they show respect for each other’s learning and thinking?
   —Did they talk to each other beyond the levels of participation required in the courses? Formal or informal online interactions?

3. Intellectual level of students’ community interaction: What are the characteristics of this online learning community?
   —Was it easy for them to accept or reject alternative viewpoints?
   —Were they willing or reluctant to debate controversial issues?
   —Were they sensitive to the context of individual students’ professional life?
   —Did they raise or avoid difficult questions? Did they allow back-and-forth intellectual exchanges?
   —Did the individual students try to avoid revealing their personal or professional identity? Did they speak openly of the realities of their practice?
   —How did the community develop support for each individual?
   —Did the group allow multiple perspectives, negotiate meaning, and come to new understandings as a result of this process?

Next, the findings are discussed in three different sections: first, the four instructors’ changing instructional roles; second, the students’ social engagement; third, their intellectual engagement.

3.4 Instructors’ changing roles in the virtual learning community

In a regular classroom, instructors often possess greater authority over the content knowledge of their specializations, which are what the university values as major intellectual assets—their strength in constructing knowledge and formulating theory. This content authority has shaped how instructors interact with their students in the classroom. The major format of interaction is usually to examine issues with a critical
approach, that is, it is a learning situation where issue-centered intellectual discourse dominates. Instructors take leading roles in validating different positions on issues and trends. In the online classroom the instructional delivery took on a different form. From analyzing the textual dialogues posted on the seven online course websites, each of the four teacher educators who taught in the online program adapted their roles in this new learning situation. To sum up changes in the new roles, there is no better way than the following theater analogy by Lynch (2002):

To use a theater analogy, the traditional instructor serves as the lead actor—the one who must carry the show, even though there is allowance for other characters to interact. In contrast, the online instructor is more like the director—one who ensures that all the characters play their part and that the show moves smoothly from beginning to end, adding his or her expertise only when the actors seem to need assistance. The director (teacher) leaves the content delivery to the script (Web pages and assignments) and the uniqueness of character development and nuances of meaning to the actors (the students). (64)

In the virtual classroom, the class discourse—the depth and breadth of the drama—was on the hands of the actors—the students, for spontaneous and creative addition and revision when necessary; and how much direction he or she needed from the director was his/her own choice as well. The conditions all pointed to a more student-initiated or students-directed and flexible learning situation. The following are examples from the textual reconstruction of the instructors’ presence in the virtual classroom.

3.4.1 Re-constructing instructors’ online presence

The four instructors—named E, F, G, and H here—in the online program are all highly experienced art teacher educators. Each of them has established substantial academic credibility in their content specialization, which has made them the lead actor
in the spotlight intellectually in the traditional classroom discourse. Their role in the classroom is well-received by the students who look up to them for both academic and emotional support. The way these instructor-experts discuss and structure the course interactions results in students’ confidence in their professionalism. In the online classroom, however, their physical attributes and presence—their voice, facial expression, and body language—were lost, and they needed to reconstruct their presence as an intellectual mentor through textual communication. Interestingly, although each had their own variances in adjusting to online teaching, their mentoring styles all exhibited more of their caring personality as an academic supporter for learning, and less as a strong intellectual leader to dominate the academic discourse. And most importantly, their newly adapted roles contributed to the creation of a productive virtual learning environment for the students. Next, I discuss both their commonalities and distinct differences in their new roles as an online mentor. The differences were illustrated more in details with evidence of their written texts.

3.4.2 Commonalities and differences in online teaching approaches

Holding common goals and high expectations for this online program, the four instructors shared the same general instructional approaches. The first commonality was that they all assigned a term project, which usually began at the second half of the course, in which students applied the ideas they learned to their own teaching context. Project-directed learning was used by the instructors to encourage theory and practice interaction. The second commonality was their goal to maintain the same intellectual standards as in
regular graduate courses. That is, they strove to model and promote intellectual clarity, consistency, and depth in students’ written responses, assignments, and also their commentaries to peers. The third commonality was that the instructors each committed a great amount of time and effort in course design where they structured the class, the course activities, and the expected student responses and interactions. In addition, they all agreed that it was important to design the online course from the individual learner’s perspective, to allow self-directed learning to take place.

The instructors also displayed their own distinctive styles, approaching this virtual community from different angles, and consequently they elicited different social and learning behaviors from the Students. To keep my discussion in focus, I limited myself to examining how the instructors’ distinctive styles helped to foster community-building, including setting intellectual standards, social and interactive tones, and students’ self-expectations. This is not to claim that these distinctive styles are necessary elements for online teaching in general. Rather, it is only to illustrate the impact of the online instructors’ professional presence and instructional styles on the outcomes of online learning.

Also, what is presented in the following is not intended to categorize the four instructors into types of online instructors. Rather, their online teaching styles are discussed because of their relatively stronger features, as shown in their online written communication, in comparison with the other three instructors on the same aspect. This means that, for example, when I described instructor F as the socially-sensitive and caring online instructor who valued this as an important community’s trust-and-support-
building catalyst, it does not imply that it was absent from the other instructors. It only means that instructor F’s role as a socially-caring teacher was shown more clearly or more often in her online communication texts which I was able to draw evidence from.

3.4.3 Instructor F’s online approach: Modeling ideal attitudes for socially-supportive learning community

First of all, by examining the postings by instructor F over the three online courses that she taught in the program, one could easily sense the encouraging and sensitive role she played. The language she used to interact with the students was always positive and encouraging. She was not afraid of showing her feelings to the virtual community—words of heartfelt emotions were commonly found in her postings. Another distinctive instructional style she adapted in the virtual classroom was portraying herself as a learner in the community. Rather than as an academic leader controlling how learning proceeded. This was evident from her postings where she referred herself as being motivated by the students’ response to think further. Compared with the role she often played in the regular classroom, her online self—or online professional identity—seemed to downplay activity control and take up the role of motivated learner and become active in integrating—not leading—the ongoing course interaction. For illustration, here are a few extracts from her online postings (these were taken out of different courses contexts and are not in time sequence) with my observation notes:

Dear L,
As I said in an earlier response, you certainly stirred up some response among the group. I appreciate your honesty about integrated curriculum and don't take it as pessimism, but honest wondering. I also appreciate the involvement by others in responding to your thoughts. Ideally, this is the way a good online discussion
The above message shows how she encouraged community input and suggested that she valued being sincere and honest in community interaction.

Dear I,
Thank you for your soothing words of comfort. We do realize how difficult this can be to take on when you already have a full time job and are trying to also have a life as well. If it makes the group feel any better, you should know that I am very pleased and impressed with the level of your work and attitude. It certainly makes teaching much more of a pleasure for us. I hope you will all take T's words of wisdom and try to enjoy this rather than get too stressed out over it. —F

In the message above, she was expressing understanding and sympathy over the students’ busy and sometimes uneasy professional life. Such a personal concern made the community less formal and more personal.

Dear Group,
Thank you for all the feedback about my article…. It was very encouraging to find that the article speaks to classroom practice which is my primary intent. I was interested to find out which of the examples resonated with you or if any of them did not. …I realize that writing, especially longer texts, will not always work in your classrooms. Thus, I welcome knowing about strategies that you devise for engaging students with inquiry as part of the artmaking process. —F

In the message above, she expressed how much she valued and respected the students’ input about experimenting ideas in their own classrooms, and encouraged individual sharing of practical experience and insights.

Dear C,
You may not feel that you are making a lot of progress, but I am really excited that you are trying to change your teaching practice to a more discovery based approach. It takes time for you and your students to grow into it. I am heartened by your recognition that "without adequate strategies students become disillusioned and confused." This, for me, is one of the most difficult points to make that. After a frustrating morning, your openness to the ideas in the chapter has put me in a much better frame of mind. —F

works. —F
(Message Id: W2-33DF)

(Message Id: W2-74DF)

(Message Id: W2-231DF)

(Message Id: W2-205DF)
In the message above, she conveyed her passion toward students’ learning and growth. This would in turn make the students value their own learning because they saw their instructor did so.

Dear O,
I was on my way to bed and not planning on responding tonight, but when I read your description of how you do not love your job now, my heart went out to you. I wanted to say you, as other teachers, have a tough job. It is no fun to teach unless you can find time to do some of the things that you think are important and make you feel successful. There will of course never be adequate time to do everything the way we want, but if you can't find time to do some of it, then I'm afraid you will become one of the drop out statistics… I hope you can find ways to make things better. —F
(Message Id: W2-63DF).

In the message above, she shared her personal feelings about how to cope with teaching as one’s profession, even though struggles come and effort seems unrewarding. This kind of message would encourage students to share the real life obstacles they experienced in the teaching field. It would further the development of emotional ties among the members of this community.

These extracts show how instructor F presented herself in the virtual classroom as both academic and emotional supporter in the learning process. Her positive and caring emotional words made the virtual community more personal and less formal. She modeled very often personal ways to convey feelings and emotions to the virtual community, so that the students would do the same. In a quiet way, besides her content delivery and intellectual guidance, she was setting ideal social behavioral patterns for the community to promote caring support for each member. Caring for each other intellectually—that is, becoming aware of and caring about their peer’s’ learning process—would come only after caring for each other. In retrospect, the students
gradually opened themselves up and became more emotionally-engaged in the virtual classroom after instructor F’s first course.

3.4.4 Instructor H’s online approach: Modeling ideal intellectual standards and research ethics

Teaching how to do research through an online course is a challenge. For it takes lengthy back-and-forth textual communication to clarify the sorts of complex problems involved in a research endeavor. Instructor H and instructor G both taught the research writing courses in the program. In instructor H’s and instructor G’s research writing courses, their comments to individual students were not revealed to the whole class in a public way. Instead they used e-mails to correspond with individuals. In the public discussion board, students discussed problems, exchanged and shared their issues and perspectives regarding conducting this action research. But as the program researcher, I was shown examples of instructors’ research advising communication records by these two instructors for my research purposes. Therefore, I had access to observe this individual mentoring that built intellectual standards on an individual teacher-to-student basis, as in the one-on-one format in a regular campus.

Instructors H and instructor G are also respected as the content authority in their specialization and take leading roles in shaping students’ discussions and intellectual orientations in the regular classroom. Instructor H’s face-to-face classroom instructional style is very structured which offers students clear direction as to where the course is moving to. In the online research writing course, instructor H offered a reflective big-
picture approach to guide the students in conceptualizing their research plans. Below are two examples of her response to a student thinking about how to conduct the research.

From this extract, we could see how her critique of students’ research reports helped to map and pinpoint the necessary steps to further the research. Her words of encouragement to the students showed her enthusiasm toward student’s learning. She became the facilitator who helped students to identify their individual place in academic life, and how they could integrate knowledge with practice. Instructor H wrote to one student:

Dear Q,

Whoa you wore me out just reading this proposal. I know you are of high energy, so maybe all of this is possible. You have a great start on what promises to be an exceptional project. I really think your introduction and background sections are strong. I'm not positively sure that your question is completely set yet because I see what you are doing in two distinct parts/two questions. The first is planning the curriculum using video/new technology and the second is trying it out. It seems you've kind of blended some of this stuff together for now. Maybe later you can separate it out a bit for clarity. Try thinking of the project in terms of processes (1) the processes and steps involved in planning and (2) the processes and steps involved in teaching. This might help to analyze data and to write up your experiences. It could also help in the data coding process. I really like your project and the way you think about curriculum and teaching. This is terribly exciting stuff! However, I do think this project is more about you and your curriculum development and delivery than it is about student learning. You do gauge your success in curriculum development and teaching in measure in how well students learn what you are teaching though. Think about this. Maybe it would be a way to focus this project a bit more and help you decide what is really important to document. Congratulations! —H

(Message Id: S1-16PH)

Here is another extract by instructor H in which she connected the participant’s research process to his professional practice and pointed out the significant interrelationship between the two. She wrote:
Dear C,
I read your proposal for the MA Project and think you are on the right track. You may have bitten off a bit too much, but you seem very able and this plan is well configured. So my advice to you is just do it. Your introduction and background are written in an interesting narrative form. I feel this form may work for you throughout the project, but you might want to check with Sydney on this to be sure. The questions and concerns you raise are legitimate. These ideas that torment and plague you are the ones that concern many in the field. You are going through what graduate school is meant to put people through—reflective practice. We struggle to make meaning out of life, theory, and what gives our existence value, thus, what we feel is worth passing on to others. This is really a normal reaction to having your taken-for-granted assumptions questioned. You might just as well go with it, because from this point on it probably won't go away. You are now involved in the most important part of graduate school—the construction of new knowledge. This is what the theory and the practice of other is built on. It is an immense responsibility. You seem up to it. I trust you to do what is right for you. You are now a practicing scholar. Soon you will learn to love this believe it or not. Thinking can become addictive with practice. Just learn to stick up for, and support what you feel-believe is right for now. (Even if others don't). Tomorrow (metaphorically) these ideas and values may turn to dust, and others more relevant to the social, political, and economics of the times and better argued with take their place. Congratulations on a great start and envisioning a most worthy project. —H
(Message Id: S1-28PH)

Like instructor F’s role in setting the emotional depth of the virtual communication, instructor H conveyed to participants in her online guidance about what academic research and intellectual quest was really about. Telling them what role the research should play in relation to their professional practice. As she wrote in her message above, the research endeavor involved the individual teacher’s life philosophy, professional insights and beliefs, broader context and culture, continuing quest for better teaching, and academic responsibility to seek better answers. These messages implied academic expectations and research ethics and could be seen as setting academic norms in the
virtual classroom. The students would more likely hold similar standards and expectation toward their own and others’ research.

3.4.5. Instructor G: Modeling critical thinking

By comparison, instructor G’s online advising approach was more of an inquiry-based facilitation. His research critique went into great detail to facilitate students’ critical examination of their own research assumptions, where instructor H’s approach guided students to look at their research process from a holistic perspective. He looked at the student’s research from different angles including the research purpose, logics of formulating research, theoretical foundations, data analysis and interpretation, and he helped students to check on their own thinking process at each stage. This was critical to making them a more reflective thinker in conducting research (Hsu, 2004). Instructor G’s critical questioning approach forced students to clarify the conceptualization of a research at the preliminary stage, which was often full of uncertainties and ambiguities for the beginning teacher researcher. Below is an extract of his response to a student’s research proposal.

Dear L,
Your research looks like this: 1) “How can visual art activities at the secondary level change to better evoke students to exhibit analysis, synthesis, and evaluation?”
And it also looks like this: 2) “To see if students could be coaxed to use higher order cognitive thinking in their class work.”
And then it contains this: 3) “Does the requirement of a “big idea” over a series of art projects require the student to do more analysis, synthesis and evaluation than a series of unrelated projects?”
And finally, there is this: 4) “Does the use of synthesis and evaluation change when a student critiques her own work as opposed to a classmate’s work or work of a famous artist?”
You say that you want to identify analysis, synthesis, and evaluation in 1) student
art works and/or 2) student talk or student writing about artworks. You then introduce the further variables of a) students’ own artwork or their writing about it, b) students writing or talking about a peer’s artwork, and then c) students writing or talking about professional artwork. I’d like to know quickly if you are looking for evidence of “analysis, synthesis, and evaluation” in both artmaking activities and in art response activities? It sounds like you are. If so, have you defined what “analysis, synthesis, and evaluation” looks like in a work of art? Can you do this? How will you do this?

Question #3 and #4 above are two different although related cognitive activities: one primarily verbal, the other primarily visual. I believe that Bloom was working with verbal thinking operations. You seem to want to work with both verbal and visual thinking operations.

You will have to apply Bloom’s verbal interaction to students working with non-verbal materials. Thus, you will have to invent new definitions or exemplifications of what “analysis, synthesis, and evaluation” look like in clay or paint.

Or perhaps you going to get into the minds of the students while they plan and make art? That is, are you going to have them think out loud to you as they think about “analysis, synthesis, and evaluation” while they make a painting or a sculpture?

You say you will “examine the work of my advanced art class by reviewing past work and comparing it to current and future lessons specifically constructed to require the use of analysis, synthesis and evaluation.” If this is really what you are doing, I don’t think you will answer your question(s). You will be comparing “work” to “lessons.” First, I don’t know what you mean by “work,” or how you will find “analysis, synthesis, and evaluation” in artworks, as I just said above. Second, I don’t think you want to compare work to lessons, but work to work, or lessons to lessons.

Overall, I think this is way too much for this course and project. Please scale down and get more specific.

Most importantly, I think, is for you to first explain what you think Bloom meant by “analysis, synthesis, and evaluation,” and then how you will identify these in 1) students’ art works, OR 2) students’ talk or writing about art works, their own or that made by peers or professionals.

Perhaps, after clearly identifying “analysis, synthesis, and evaluation,” take ONE of these three concepts of analysis, synthesis, and evaluation, and investigate how it emerges in students’ Artmaking OR in students’ writing about art works.

Let me know what you think of these suggestions, please. —G

(Message Id: B2-72PG)

This extract is long to allow the reader to see how instructor G meticulously analyzed the student’s thinking process. With such an approach, instructor G acted similarly to
instructor H on individualized advising, but through a rather critical examination on research conceptualization. Students would be bound to think more critically in their own research conceptualization. This, I believe, also promoted the students’ critical responses in the virtual classroom to each other’s learning. Moreover, this kind of highly articulated intellectual feedback helped to foster sustained research discourse between instructors and students, and among the students themselves.

In terms of setting intellectual standards, instructor G’s approach of research critique probably was more effective in conveying to the virtual community what high standards meant in graduate research than simply giving good grades. Since students did not have access to others’ grades, they would not know which student got what grade on which assignment. Consequently, they would not know how academic performance was valued at graduate level. However, as the community evolved through the different courses, they seemed to become better judges in constructing critical responses to classmates’ learning. The other instructors all demonstrated valuing critical thinking in their online teaching, but instructor G’s analyzing approach made it more transparent for the learning community. In some way, instructor G’s way of evaluating thinking demonstrated to the community how to assess learning and why clarity and consistency in one’s thinking process was important.

3.4.6 Instructor E: Modeling community reflection and collective thinking

Another instructor—instructor E—who taught both research writing and assessment courses demonstrated yet another approach to the building of this virtual
learning community. His approach was again different from his usual face-to-face instruction. Unlike his face-to-face classroom instruction where he is the great philosopher who leads academic discourse, he downplayed himself to adopt the role of a learner in the virtual classroom. In his assessment course, there were questions after each reading for the students to answer as a collective reflective activity, and he answered the questions himself as well to post online. In the virtual course interaction, his presence as instructor was subdued—he had become a student himself. Every week, he conceptualized theoretical and practical ideas and reflected together with the students and posted what he thought was important at the time. After the weekly online discussion, he then summed up the virtual community’s posted responses as a whole, and pinpointed directions where the collective thinking seemed to be heading, and particular insights people had brought that deserved second thought. He seemed to serve as a mirror to reflect and recapture what happened in the group thinking process. This new form of instructor-as-student-himself and of instructor-as-the-mirror-of-learning was new to the learning community at this time, and lasted for the first half of the assessment course. In the second half, where students were conceptualizing their term projects, instructor E began to assume more of a usual advising style as seen in instructor H’s and instructor G’s advising approaches, and gave individual attention to student’s learning process.

Below is an extract of his answer to assigned questions about a reading, posted online in the discussion board where he analyzed issues not to give out absolute answers but to share his thoughts at the time:

**Question:** Would a national assessment imply a national curriculum?

**Answer:** Well, I think that strictly speaking a national assessment would not
imply a national curriculum. We already have the NAEP (more comes on that later) and it was created specifically to ”take the temperature” but not to affect curriculum. On the other hand, many people feel that this means it cannot assess what students actually learn because it is curriculum-free (and, because it has no consequences, nobody is tempted to teach to the test). But any national assessment that has consequences would surely affect the curriculum. And unless it was based on the same curriculum for everyone, it could not be a fair assessment. So I think that the answer, practically speaking, is yes, in the long run it would promote a national curriculum.

**Question:** Are the National Standards a step in this direction?

**Answer:** The Standards were deliberately written in very general ways, so they would not determine a specific curriculum. But they do try to constrain what teachers can do and what they should do and they may be re-written at any time. Now, for example, in art they do push away from Lowenfeldian free expression toward a DBAE-like (updated) curriculum. Of course the strength of their push depends on the sanctions that accompany them, which is left to States and districts to determine. So it seems a step, but a small one.

**Question:** And would this be desirable?

**Answer:** I pass on this for now.

**Question:** Could there be a national assessment that is fair to all students and schools?

**Answer:** It was one of the intentions of the Standards movement that there should be standards affecting teacher quality, time in the curriculum, extra help for various groups of students, etc., so that all children would have reasonably similar opportunities to meet the Standards. Then it could be fair. But of course this takes money and the current administration has notably failed to provide it. —E

(Message Id: P2-03DE)

His instructional approach came at a time when the virtual community was mature and independent enough to learn in ways that pushed the individual students to take control of their own learning. The students’ growing independence was evident from how they maintained a high commitment in participation in the course activities. By high commitment I meant the high number and quality of their constructed postings and
responses, as compared with their previous course performances, even without the obvious presence of an instructional leader. As a result of the instructor’s taking on a new role to recapture the collective thinking activity, this assessment course seemed to develop a critical and reflective community as a whole. It promoted members to be more aware of their fellow members’ intellectual contributions. Moreover, this approach also made it possible for the community to take into account multiple viewpoints but stay connected on central issues at the same time. However, the resulting autonomy of this learning community was built on the grounds of previous instructors’ efforts to create a virtual community with high standards and expectations.

In the end, these four online instructors complemented each other’s instructional styles in exploring the limits of physical isolation associated with the online learning environment and fostering the virtual community from different angles. With instructor F’s online presence as a professional who was not afraid of showing her passion for learning, and at the same time her anxious quest for better answer, she brought more personal and sensitive elements to the virtual community. With instructor H’s big-picture approach, the students were able to think from the big picture to reflect their own and their peers’ research processes. With instructor G’s highly articulated questioning approach, the students were able to understand the expected intellectual rigor and were held to higher levels of expectation. With instructor E’s liberal approach of quietly de-emphasizing his presence as an answer-provider, the students were encouraged to take control and responsibility for their own learning and the virtual community learned to take autonomy on the dimension of critical discourse. Taken together, these four
different styles—the personal/passionate, the reflective-holistic, the constructive and
critical questioning, and the autonomy-building—played important roles in laying out the
intellectual, academic, social, and cultural cornerstones for the virtual community.

3.4.7 Online instructor’s role on shaping the community’s social and intellectual
interaction

Looking at the literature on online distance education, the textual representation
of online instructors and its social and intellectual consequences for student learning has
been a major topic. An experienced online educator at University of Phoenix and a major
player in online learning in higher education, White (2000) stressed the online
communicational impact on students. He said:

Nowhere is thinking more evident than in the textual environment of the online
classroom. If writing is thinking, then online students display their thinking
throughout the course, illustrating their individual styles and changing attitudes. Online
instructors can show recognition for their students by maintaining high
standards of rigor that challenges students and by building opportunities for
choice into their online courses… Online educators, like other educators, are
fundamentally in the business of person building. As in all classrooms, person
building is the foundation for learning and growth in the online classroom. It is
the quality of human contact that continually develops online student—constantly
reforming who they are and who they will become. Whenever the instructor
communicates interpersonally online, he or she participates in the building of
people and shares in their learning and growth… (6-8)

The instructor’s effort in person-building process affected online students’ individual
intellectual development and also the social aspect of the online classroom’s culture.
Every single posting in this online course was like a little brick which little by little built
up the quality and life of the virtual learning community. The fifteen students in the first
year displayed significant social behaviors that showed solid development of mutual trust
and respect among themselves. To this result, the four instructors had undeniable contribution. Researchers have confirmed that virtual learning communities does not just happen with technology acting along, but largely depends on the promoting of engagement and participation from instructors (Porter, 2004). Guan and Powers (2000) also said that “the ‘perceived caring’ on the part of the students in regard to the instructor enhances the students’ attitudes toward the class and their perception of learning experience…” (207-9).

The four different mentoring personalities in the online program illustrate that, unlike traditional face-to-face instruction which allows instruction to focus on content knowledge, effective online instruction required both content knowledge and communication skills. Their instructional delivery relied heavily on how they communicated their ideas and feelings. This posted a new challenge for the teacher educators and explained why they adjusted their presence to be more of a supporter for learning than an expert-leader. A successful teacher educator needs to be a good listener and intellectual supporter. They also need to convey their caring support and expectations for the students more explicitly.

3.5 Students’ social engagement

3.5.1 Social engagement of the online community in its early stage

Literature of online education has viewed building a social community a prerequisite for productive educational experience. This is primarily because of people’s need to have human contact especially for adult students. Here is an example from an
experienced online learner’s perspective:

…the online learner needs a social context for learning. Working adults may be self-directed, but they also value the exchange of ideas and meaningful relations. It is particularly important that online programs address these two issues. I suggest that online programs give their students the opportunity to follow the progression of classes with the same people, what has been referred to as learning communities. I found that in doing so, I was able to develop close relationships that enhanced my own learning. It gave me a chance to get feedback from people I trusted about how much I learned throughout my program and how other people were struggling with concepts and issues. (Priest, 2000, 42)

When comparing the group’s social development from the first course to the final course, it is obvious that in the first course (after the first on-campus meeting) people said little about their local contexts or agendas. The postings in the first online course did not show significant differences from those in a regular classroom—students’ writing often focused on reading assignments only. Very few voluntary initiations of theory-practice discussions were posted. Informal talk about each other’s life as a teacher, a parent, an artist, or a mid-west American woman were rarely seen. They discussed reading materials with little reference to their individual backgrounds. Moreover, everyone seemed to post in polite manner and their postings were less addressed to certain individuals than to the group as a whole. They did not initiate public conservations with individuals, perhaps because it might make other people feel ignored. This was very different from the later development when postings often started with someone’s name and other people seemed to feel at ease to jump in the discussions whenever they had points to add.

However, by the second online course, the students began sharing their professional life with each other, both for the sake of sharing and also for asking advice.
and opinions. This aspect of the community interaction happened alongside the regular
planned course activities and, though unplanned, the social interactions signified the
students’ growing recognition and sense of belonging to the community and their
emotional attachment to it. Students communicated with others through reflecting on
what was going on in their own professional life. In their stories, we saw a group of art
teachers sharing their struggles, hopes, feelings of accomplishment, with teaching stories,
as well as their disappointments and unresolved problems.

3.5.2 Evidence from the online interactions

In the following posting, student K noted how she valued the learning process and
learning outcomes of her peers when expressing appreciation to her instructor for a very
successful online course experience at the end of the course. She said:

Hi, F,
…The only thing I miss is having the time to really read other's work and discuss
the issues that have been investigated here. For this, I wish there was more time!
The ideas are brilliant! It's a huge stimulization. I dearly loved this opportunity
and, as a teacher, with little time, thought about all of your efforts to design this
course (a work of art), wondering where you find the time...Thank you so much
and congratulations to you for your success in our success. —K
(Message Id: W2-43DK)

The last sentence “Thank you so much and congratulations to you for your success in our
success” revealed that the student had developed ownership to the online learning. As
many studies have shown, the human element is often the hardest part to build into online
classrooms, but, once built, enticing educative possibilities can become realities.

Another example. In the following posting, B indicated that although he could
not start to contribute yet to the discussion (due to his busy school schedule at the
beginning of the term), he still managed to find time to monitor his peers’ learning, and read what his peers had to say about discussion topics:

   Dear J, I, and L,
   Sorry to post so late but like L, I’ve been up to my elbows in the school musical production. I’ll try to keep up. I’ve been reading all your entries and I am amazed at how well focused you are. I’m trying to get a handle on the format of this class right now as far as the sequential order of the questions and the number of discussion assignments we need to finish each week in order to complete the tasks on time. —P
   (Message Id: P2-413DP)

   Since students in the program were full-time teachers, and also parents, husbands and wives, it was imaginable that they each led busy personal lives outside of the online classroom. Everyone had to learn to have a life and still find time and effort to focus. When a caring relationship and respect for peers’ learning was developed, it seemed to become a positive catalyst to make students stay committed. This observation is supported by the students’ surveys, where many said they often could not wait to hear some other students’ assignment postings whose thinking they deeply admired. Some reported that even if they had not yet started working on an assignment, they went to the online classroom to see who had posted and what they had to say. Their social commitment to this group’s learning seemed to help them stay motivated.

   When a social relationship and intellectual bond was established, they did not hesitate to praise whenever a good work was posted. Words of admiration and respect were often found in postings in the second half of the second course. It seemed that no matter how academic an assignment was, personalities and informal reflections could be found as well. Here is an example where O did not hesitate to express her strong social
and intellectual bond to the class:

I am enjoying all the postings. I love all you guys. I'm happy to know you all. A human quality prevails in an institutionalized course, and I feel very lucky. Thanks to [the instructors] for asking the very pertinent questions. They motivate us. We are all striving for that point of newness, and continuity and that brings us together. Hey, Q, I'm not trying to get all gushy, I just know that I can never be as smart mouthed as A, so a little brown-nosing can't hurt. Plus I DO care about you all. :) —O
(Extracts from Message Id: S2-906DO)

Another example. In the following posting, I showed her emotional attachment to the community when a new school term was about to begin and she was eager to get back to the online class community:

Dear class,
I am beginning to feel like I am out here all alone during the summer vocation. I need someone to communicate with. My summer vacation ended today and I have returned to the classroom ready and excited to begin a new year. I have a really hectic schedule this year, I am in three different schools. Thank goodness I don't have to do an art show this year. I want to hear how everyone else's year is starting off and how the course is going for you. I can't wait to hear from someone on the other end. —I
(Message Id: W2-225DI)

Social and intellectual bonds often reinforced each other. This was obvious in countless examples where students voluntarily sought for peer opinions, or when they crossed over pre-assigned small discussion groups to join discussions that they just could not stay out of. This again showed the human connection that helped to promote productive and fruitful learnings in virtual space.

In the following two postings by student A, sideways to regular class discussion, she initiated questions that she thought were important to art educators and was interested to know what her peers had to say. The postings indicated that she respected and valued her peers’ professional judgments. She wrote:

Hi, class,
Do you think mass media and technology is homogenizing at least all Western Civilization (I don't see an eastern/western mix for a long time, yet.) into a blend that is strongly flavored by the most economically powerful (guess who)? And do you think this is something we should fear or welcome? And do you think that the modernists were right after all, and that all this postmodern thought is just a last, dramatic attempt to stave off the inevitable death of national culture? Something to ponder and write to me about. Love and kisses. —A

(Message Id: S2-260DA)

Dear group,
Has anybody read the following article from the latest issue... July/August 2002 of Arts Education Policy Review: "Discipline before Discipline-Based Art Education..." by Theresa Marche? It provoked lots of thoughts and questions, and I'd love to discuss it. My best. —A

(Message Id: S2-275DA)

In the following example, one student joined another group’s discussion and shared his response with the members. Then he got a reply in the discussion board telling him that “this group is too together to let artificial boundaries stand in the way”—an indication of the strong social commitment. This student’s online conversation reflected his own personal philosophy, which he was not afraid of showing to others:

Hey P,
I know I’m not in your group but tough cookies you bring up an interesting point about the role of education in humanities. Art seems to flourish in spite of education. In some ways the educational denial of its importance has acted as a catalyst for expression. The world in general seems to embrace the riches that art and the humanities has bestowed on it but sees little need to reward or even recognize that from which we have all benefited. The more formally educated we become, the less enlightened we seem to be. In all ancient and so called primitive cultures there was no need to question art's usefulness. It was part of the whole.

—J

(Message Id: P2-38DJ)

J,
You said it well. You are always welcome to post here. This group is too together to let artificial boundaries stand in the way. —P

(Message Id: P2-41DP)
In retrospect and based on the class communication texts, one explanation of the strong social tie was that through the course interaction, students found common grounds to share professional values from. When a student revealed professional beliefs and values that were positive—caring for students, confident of what art can bring to students, etc,—other students applauded. Again and again where they would say something like: “Hey, you are a good art teacher and I admire you for the qualities of ….” The following extracts illustrate this shared professional recognition:

**N,**
I opened your posting this morning and I truly enjoyed reading about your experiences. From what you write, I feel that you are a caring and giving teacher and because another art teacher can draw better or critique art work with more confidence does not mean they are reaching their students as you seem to be doing. Your students are fortunate to have someone who cares to pursue their own education and continue to learn all that they can. Happy holidays! —B
(Message Id: S2-950DB)

[Dear all],
…a happy season to you all, I am a better person for knowing you, really. Crazy day ahead. Love —M
(Message Id: S2-970DM)

**L,**
No, we are better people from knowing you. Good luck to you and your wife and we await the good news. By the way your work is amazing. Happy holidays to you and your family. —S
(Message Id: S2-976DS)

The above quotes show that there was mutual respect by students toward their peers whose positive professional values they admired. As they were all practitioners, professional attitudes became an important element to hold them together as a community. This professional bond, together with the social bond, made the virtual classroom less
threatening for honest communication to take place. Therefore, learning was further 
enhanced.

There is yet another way to look at the social and professional bond. In the virtual 
classroom, students often shared their professional experience with an open heart even
when the experience was not positive. This sharing of not-so-good experience indicated 
trust was developed. In the following posting, Q shared details about how his school
conducted standardized assessment tests in art learning and how he learned from mistakes.
He voluntarily described his experience—despite its imperfection—which showed his 
candour with this community about his own professional experience:

Dear class,
Yeah, I survived the week from hell. Previous week was the hassle of Scholastic entries, then last week we had a HS art show at a local gallery (My kids did great, 2 awards out of 8 entries) plus our semester ends Monday (We are on blocks so we basically teach a course Sept. >Jan. then another schedule Jan.> June). Last spring we were REQUIRED to have a multiple choice, comprehensive exam for each course. In the hassle of having to write three multiple choice exams for my classes I let the other art teacher (young, enthusiastic, but trained in theater and no clue about many things) write the exam for her Art I classes... This year I forgot about it, but we have another teacher now (Thankfully an art teacher) who is also teaching Art I. She came to me with real concern when she saw the exam. I had to agree with her. It had 200 questions, 35 on art history (Some so arcane the other teacher and I couldn't answer them!), it had 20+ questions just on rhythm, and diagrams on perspective that were incomprehensible! We had a meeting on Thursday that thankfully went well. We came up with a quick fix that will not penalize the students... —Q
(Message Id: P2-30DQ)

These extracts all show how the students valued their fellows’ professionalism and their perspectives. They would go into great detail to share their stories of teaching. They also demonstrated their emotional reliance on this community and showed care for their peers. Without this social network and its intellectual output, the students would not have opened up to discuss intellectual issues with a sincere attitude, and to learn life
stories from others. With the socially-supportive relationship well-established, they were able to raise issues whenever they ran into problems at school.

This professional community seemed to have developed a life of its own; when a member needed advice or needed to share ideas, he or she had a network of fourteen other fellow teachers to go to. This initiation of raising questions and telling one’s own professional life happened sideways to the regular course activities. And it points to the possibility that after the program ended two-years later, the students would have a rare long term professional network to continue dialogues in virtual space. In fact, after the program ended, the group requested to be continually connected with a mailing list service. The possibility of holding an annual reunion was even discussed at the group’s final on-campus meeting.

Professionally, this network would help to broaden the professional reach of these art teacher students, who are often a marginal population in their schools, since the subject of art is often not seen as a core subject in K-12 schools. As Cohen-Evron (2001) has said, the feeling of being alone is not new to most art teachers. From her research, she learned that belonging to a professional network would help a great deal provide moral as well as professional support. She said:

Naomi, Tamar, and Noga described in this study said that as art teachers they felt isolated. That feeling was expressed even in Noga's case, who portrayed herself as being part of a team of teachers at her elementary school. Still, she felt the lack of having other art teachers with whom she could discuss curricula questions and share her debates about the goals of art education. She felt that an art teachers' group was in particular necessary in a field that does not have an imposed curriculum and is heavily influenced by the teachers' deliberations. (347)
3.5.3 Some statistics about community participation

Now it maybe time to illustrate community engagement and levels of participation with some statistics. However, these should only be seen as giving a general picture, not definitive measures, because some courses required less frequent discussion and more project-based learning than other courses. In the first online course (in the summer of 2002), the total number of discussion postings was 269, and 11 out of the 16 students (68.75% of the whole class) read 40% of the postings. (The postings included both whole class and small group discussions). But one and half years later, the seventh online course’s statistics showed 15 out of 16 students (93.75% of the whole class) read 60% of all 704 postings. In addition, in the first online course, students logged on to the course website 8 times weekly on average. But in the seventh online course, students logged on to the course website 15 times weekly on average. To sum up the increased level of participation, the total number of postings had grown from 269 in the beginning of the program to 704 in the seventh course, and the frequency of logging to the course website had increased from 8 times a week to 15 times a week. These figures showed a growing participatory level and involvement in the virtual community.

3.5.4 Confirmation from the survey results

The results of the students’ survey responses revealed their views about how they came to develop a strong relationship to this virtual community. When asked “how soon
did you find the need to be understood by the online community members? Can you recall at what point you feel sense of belonging to the group?” most of the students indicated they already felt a group bonding either during or after the second online course on studio methods. This matched my observation and analysis of their online activities. This second course was the first rather intense one at the beginning of the program where course activities were demanding in terms of time and effort. They also felt an initial social bond to the group during the first week-long summer meeting session, and they attributed this to the welcoming and positive atmosphere of the department and instructors.

In addition, they appreciated the diversity of this group of art teachers, which added to the social bonding. In general, the emotional support they sensed from the department staff and faculty, and the positive learning spirit of the group members seemed to get the program off to a good start. This entrusting of human element had been documented everywhere as critical in successful online community-building and learning. To this, our program was no exception. Here are some quotes from their survey responses after the program:

With this group there was always someone who aligned with your way of thinking…

The first week at OSU was important. They [faculty members] did a spectacular team building job… The people who put this together cared enough to bring us together, to make us people who knew each other rather than a quick $$ like a lot of other online programs…

About half way through the artmaking class, I was comfortable with the group and by the time criticism class started I had no problem stating a different opinion…

I felt we had a very diverse group. Everyone brought something different to the
table, and not all of us agreed, but we listened…

There was a ‘bonding’ at the first summer session and the belonging began early in the [studio method] course…

[About the bonding], I would say by the end of the first course (beginning introduction), definitely by the end of the second (studio method)…

I love my online cohorts! We came from diverse areas and I was so enthralled with the fact that I couldn’t work the first summer session, because of my amazement to be connected with professional educators for all over the country, not to mention two outside the continental US. This was the most exciting part. Later we would discover more about our ideas, situations, and backgrounds, form alliances, regroup, and reform…

These remarks indicated that most of the students identified themselves with this unique online community at about the same points in time and with similar feelings. In the first stage, they felt an initial social bonding during the first week’s face-to-face meeting sessions. In the second stage, during and after the second course in studio methods, they developed further a community relationship which was strong enough to enable honest educative exchanges and learning.

3.6 Students’ intellectual engagement

In the virtual classroom, the students exhibited different learning approaches as compared with those found in conventional face-to-face settings. Both online activities and survey results had evidenced that social development was an important condition to their intellectual development. I focus on only three significant characteristics. First, their conceptualization of the relationship between theory and practice became a common learning behavior. Secondly, they developed abilities of self-assessment and peer
assessment as a result of open sharing of each other’s coursework assignments. Third, their community process enhanced and enriched the contexts in which online discourse was grounded. These three characteristics are discussed next with examples. It would be hard to see these learning behaviors if there was not a strong community support.

### 3.6.1 Conceptualization of the interrelationship between theory and practice

The followings three extracts from course postings demonstrate students’ deliberate conceptualization. The first student wrote:

> I learned that even though a straight line is the shortest distance between two points, it is certainly not the most interesting. I found out that an artist’s private journey is a lot more public if the viewing audience takes the time to look a little harder…. I have learned that there are many ways to approach artmaking. I had not previously kept a journal while working and found that it did give me insight into what I was trying to say…. Dealing with elements, principles, technique and media as well as art history through and including some post-modern work is relatively safe. However much of this work is hard for students to relate to. As we move into contemporary artists we can find ourselves moving into dangerous territory. The same questions that new art raises about government, religion and lifestyle are the questions that students are beginning to ask. Popular culture seems to be in direct opposition to the values a school environment is supposed to support and we as teachers are supposed to safely bridge the gap. How much autonomy do we give our students? Where do we set the boundaries to maintain expressive significance without stepping on the authoritarian toes? It’s a challenge, but one that’s worth the risk. A written dialogue can work as an indicator of possible problems that might occur. —P

(Message Id: W2-304PP)

This student began his reflection on his new understanding about what artmaking should be about, and then took another step to reflect on contemporary art developments. He questioned the increasing fusion of popular culture and politics, religion, etc. in the art world. He ended on what the new art means to his art teaching and his students’ learning. This shows that he was considering the relationship between theory—new art and art
teaching and practice—and his teaching and students. He tried to build connections between the art world and his classroom practice and to contemplate their implications. Moreover, his questions at the end revealed that he knew this conceptualization could invite the others to consider some solutions.

A second example. The student quoted below reflected on his new understanding of art classroom critique activities and what those meant for student learning. His reflection at the end reveals his future modification of teaching approach to incorporate his new understanding. This again evidenced the conceptual reconstruction of a student’s understanding of theory and practice:

As I take this course, I think more and more about the higher thinking skills that are used within the art classroom. As students evaluate in a critique, they are arguing, comparing, contrasting, justifying their responses, explaining choices, and becoming more discriminating viewers. They are doing this in conjunction with learning how to paint, draw, carve linocuts, manipulate wire, word, and paper… As far as what I would like to try in my class—I would like to have a critique based on artist’s involvement. This past two weeks, we have been doing drawing from observation-drawing plants in fact… A critique that revolves around the idea of artist involvement would be so much more suitable for a project like this… —L
(Message Id: B2-130DL)

A third example. The student quoted below was re-examining her perception of her students after learning new ideas about children in a multicultural course. Teachers need to reflect continuously about student needs and how they learn to make theory-practice connections about their students—their learning styles, their mental and physical development, etc—is critical. As shown in the online program postings, almost every student thought that what they learned would have strong impacts on how they interacted with their students in the future. For example, the student here recognized that art
learning can empower her students:

George Lucas’s thoughts about the mythology of his “Star Wars” series were right on. I was particularly struck by his quote “Children love power because children are powerless.” I think this idea is crucial for us as teachers to understand as we try to teach young people. Any time one can provide an opportunity for authentic decision-making within the classroom, our children grow within themselves their own power. According to Lucas, the action of art making takes “a leap of faith” based on feelings, separate from what we perceive with our senses. It is empowering to learn to trust one’s intuition, to see “with the perfect eye” past the fog, to gain the confidence to create one’s own art. —S
(Message Id: S2-767DS)

These students’ reflections all demonstrate their critical dialogues about practice in light of the topics discussed in the online classroom. They were able to critically weave theories into their own teaching context and tried to consider implications that spoke to their own teaching reality. These kinds of postings on theory-practice dialogues grew in number and depth over the first year of the program. It seemed to become a mutually-received way of making connections between the course content, the individual, his/her own context, and his/her thinking at the time. This constant reflection on what theory meant to practice and vice versa become obvious in their online postings, which was absent from their very first course. When a student reflected about issues, he or she was really inviting the other members to reflect together, and his/her reflection often triggered other members’ responses. Reflective learning in this virtual classroom became a socio-cultural activity—it was both an individual theorization of theories and a collectively-processed understanding. And one reinforced the other.
3.6.2 Developing the abilities of self-assessment

The students’ high motivation contributed to their high level of engagement with self-assessment of their own learning. Unlike traditional classrooms where instructors establish criteria of assessment and conduct the assessment, students in this group had more responsibility in monitoring their own learning and were expected to ask for help from the instructor and their fellow members when needed. They not only constantly assessed what they had learned—which was shown from the fact that they actively consulted with the instructors whether or not they were going in the right direction, but also assessed what the community had learned as a group. Below is an example where one student reflected to the whole group about what the class had gone through in the virtual classroom, and shared analogies of how she felt. She also believed that the group felt the same way as she did:

Well, this has been quite a process, don't you think? It has been an eye-opener that's for sure. I think you and I are like barn-swallows—having a hard time settling in one spot, more interested in swooping around—seeing all the angles, seeing many avenues instead of plodding faithfully down one road. Well, we might have to become more like water buffaloes—steady, deliberate, and true to their course. —S

(Message Id: W3-704DS)

Since the learning process of each student was being recorded in the online classroom, it was natural for each student to become good at peer assessment. Peer assessment reinforced self-assessment. There were eleven students who indicated in the survey that they felt learning from the others was an important aspect in the online classroom. Five said that reading others’ assignment postings helped them to become more constructive and assured. Evidence of this was the growing phenomenon that whenever a student’s
posting was genuinely thoughtful and constructive, other students would respond and comment. They commented on each other’s course assignments voluntarily when they learned a lot from them. The examples below together illustrate how strong self- and peer-assessment took place in the online classroom.

Ok, I started responding and the more I read the more I loved what I was reading. What wonderful ideas!!!!! I really like this part—the sharing of ideas that work and give sight to the artistically handicapped, like myself! I am a visual learner and the abstract is becoming easier, but until then, please keep leading me in the right direction. Thanks! —M
(Message Id: W2-540DM)

A, Bravo! I really like the way you used the term "translation." That is exactly what we are doing everyday as Art Educators. We help others to see, read, and 'translate' what other artists, from all times and all cultures, are expressing. What a beautiful synopsis. —S
(Message ID No. S2-643DS)

P, thank you. You are so right. I became so embroiled in my own little world, I forgot how enjoyable it was to open these pages and be revitalized by all the wonderful educators in our group. Thank you all! —K
(Message ID No. B2-D-AH)

Greetings! I think the hardest part of this course, and the past one, is that I want to spend all my time reading what everyone has to say. You all are great teachers, at least in my eyes!!! I have learned so much just logging in and clicking on everything I can find. —B
(Message ID No. B2-D-PC)

S, ... inspiring words... great thoughts... inspiring me. I think HERE AND NOW [a video] is about choice. Rather than making the right or wrong choice, I think of it as concentric circles. The tightest circle is a choice that fulfills some immediate need I have, and a wider circle may include your needs, and a wider circle may include the needs of our mutual acquaintances, and on it goes. We make choices that expand or contract our world. Your thoughts are expansive. Love. —A
(Message ID No. S2-796DA)

L, I knew the minute I met you in class that there was something different about you in a positive way. Your thoughts this week reinforced my respect for your convictions and beliefs. Not only are you a model art teacher but you are a
compassionate human being and anyone who comes into contact with you is a fortunate person. I'll cast my vote for you, for president. —I (Message ID No. S2-801DI)

I read A's personal reply to chapter 6 tonight and it really touched me. Her final quote something like "Criticism gives art teeth," struck home. I have fought the "my class is hands-on" battle for ten years now. I think I am moving towards making it a "hands on, thoughtful, discussion and understanding class." Give it some more freaking teeth. —J (Message ID No. B2-D-ST)

WOW! I love that quote! "Criticism gives Art teeth!" Leave it to our A to come up with the ringer! I'm going back and read what he had to say. I also have been mesmerized into thinking that art is all making and need to get beyond that attachment, which I've been trying to do, but it's like "pulling teeth" inside my head. But that quote from A makes the function of criticism leap forward and grab you. "It's a Harry Potter 'screamer'!" (I saw the movie today...) Thanks, A! And Thanks D for mentioning it! —L (Message ID No. B2-D-DG)

Reading through these few extracts, it is hard not to feel the genuine and strong respect for each other’s professional insights. How did they develop this mutual respect toward each other? Through reading peers’ course assignments, and participating in discussion activities, which involved in constantly assessing peer performances. Reading others’ social and academic entries voluntarily was a common learning behavior of all students. Thanks to the open sharing of everyone’s performance, they were able to assess what’s important and what’s critical to their own understanding.

They also learned to revise their own thinking or practice through reading each other’s works. The example shown below illustrates this exchange of teaching ideas. Q posted a worksheet that he thought could be useful for others so he posted it online. R
and D replied, indicating that they wanted to try out the ideas in their own classroom.

I feel all of us have drastically revised our methods and feelings about critiques since the start of this course. I felt I could never remember everything when I started a critique. I made a "crib" sheet from chapter 5 in Terry's book Talking About Student Art. I think I have figured a way to share it with everyone. Go to >> http://xxx.xxx.com/xxx.htm << That page has the sheet as a gif image so you should be able to print or capture it and then print it. If that doesn't work, e-mail me and I'll forward a word doc file. —Q
(Message ID No. B2-D-PQ)

I just got mine in too. Very cool! I need to see how I'm going to approach a studio project. 'Maybe with balsa scraps. Let me know if you'll be doing a project with your kids. I'd like to know how you'd approach it. —R
(Message ID No. B2-D-DR)

I'm rewriting this 'cause I just read your lesson report with the recycled materials. I'm looking forward to trying your ideas with some of my older kids. Thank you for the ideas. I'm glad that it was fun. I want to try to get it in this year yet. I need to figure out how I'll work this with the little ones. It should be fun. —D
(Message ID No. B2-D-DD)

Students’ growing openness to self-assessment and peer assessment exemplifies itself again in the example below. This student R was so thrilled about her teaching activity one day that after school she rushed to share with the online group. Sharing of professional experience like this showed that this community had developed a common ground of what constitutes a good practice. Otherwise, the student would not feel that the community would cheer for her exciting teaching moment. She wrote:

I had a neat day with critiquing and I wanted to share (imagine that). First, I had no intention of our lesson heading this way... But I was talking about reusable art and one of my students raised his hand and asked out of the blue "What is up with the barrel on the rope at the museum?" Well, first of all, I have not seen what he is talking about, and secondly, I did not really have the time to go into it. However,
(after all this criticism excitement) I began by asking what the students thought. To my utter amazement, one of my girls (seventh graders) raised her hand and said that the barrel represented our feelings and expressions. Pushing her further, she said that your feelings might be heavy like the barrel and teetering, about to fall off. Then, another student said that you could fall forward into your future or you could fall backwards into your past. Another student chimed in “You are on the edge.” Well, I could hardly contain my excitement. I could not have organized this discussion better. Needless to say, I did not cover what I had intended today, but it was a better discussion than we have had in a long time. —R
(Message ID No. B2-D-DR)

Another student responded to this sharing:

How fun! I love when things like that happen. Even the best of plans don't always turn out the way we want them to. So the surprises make it all worth while! Some days we learn more from our students than they learn from us. I tell them that every once in a while. Not too often; don't want them to be too full of themselves. Ha! —N
(Message ID No. B2-D-DN)

The dialogue reveals that they cared about what the others had to say about practical experience. When one person shared a rewarding episode or idea, the others were recognizes its merit and they did not hesitate to applaud. They cared enough for each other to reflect on others’ teaching reality. In fact, both my own observations and their survey responses confirm that they spent a great deal of time online to view others’ works. They also spent a lot of their life online commenting how their peers’ ideas motivated them to think and reflect more. This is an interesting finding because it challenges some commonly-held assumption about online learning. Such as that online students are less aware of or interested in members’ learning performance than traditional students in face-to-face setting.

Below are some quotes from their survey responses regarding the time they spent viewing peers’ works. These questions were asked: “how much time did you spend
reading your fellow students’ online assignments and projects posted in the course website?; what percentage of the total time that you spent on doing online learning was spent viewing others works?” Most students confirmed they spent a lot of time doing so, and many of them expressed that they wished they had more time to do so. Here are some examples:

It depended on the subject matter and my difficulty with the question or assignment. Often I found I read more when I had difficulty with something because another person’s perspective helped me understand the problem at hand even more…

That really varied depending on the course and the assignments. It went from minimal to ‘Why am I reading postings at 4 am!

I spent a great deal of time reading other students’ comments. This is what took the majority of time, as well as responding to all students’ entries…

In the beginning I spent a great deal, but it then got overwhelming so I focused on what interested me or what could best benefit me professionally…

I tried to read everyone’s assignment postings. That turns out to be the only way you could gain different perspectives of the group…

I came to the point when I chose to read only certain people’s assignments. I learned who made the most sense to me, whose learning/teaching style was similar to mine or what I wanted it to be and those were the ones I constantly read. I would read through the others, just not as thoroughly as some. How much time—it was probably about 1/3 spent in connection with others’ assignments…

Less than 50%. I would try to read something different each week or each time I visited the course website…

I read a lot [of others’ works], 30% maybe [of the time online]…

When I wasn’t behind in work I read more of others’ work…

I couldn’t get enough time to read ALL of the postings!! I wish I had the time to see what everybody had to say on different issues…
These quotes indicate that students deemed the viewing of others’ work a major learning activity in the online classroom. Some tried to gain professional perspectives from those whose works they came to see as consistent or responsive to their own teaching philosophy. Some tried to gain different viewpoints from reading different voices. Some used others’ work as models to start constructing their own work.

Below are some examples to illustrate how peer- and self-assessment were a common learning behavior in this online classroom. The first is an example where P commented with passion on his project partner’s ongoing process; and, from assessing his partner’s process, the commentator also assessed his own learning. He wrote:

Well, A,
You are on to some important stuff with your pursuit of the metaphor. It is a way that many of us make sense of things and a valid way help students and adults understand. As a means to express an interpretation, I think the metaphor has no equal as long as we don't trivialize it. Since I hold no credibility as a poet or philosopher, I can only encourage from my vantage point of literary bumpkin to continue in this pursuit. I'm counting on you to help me sort out my sorry little life, metaphorically speaking. As a partner I feel that I have given far less than I received. But in my defense, I have got to say that you have been a high maintenance partner. I've worn out two pairs of reading glasses since this class began. It's time to think about adjusting your medication and slow down so the rest of the world can catch up. I look forward to seeing you soon. Love. —P (Message Id: W3-710DP)

Here are two other examples where students enthusiastically praised classmates’ coursework/projects in peer assessment. K wrote:

WOW! Oh my gosh, C, that is wonderful! Your art piece says it all! All the words cannot claim the image you made for us. It is our world and represents exactly what you say, we all effect/affect each other; we're all interconnected. I guess, I just haven't seen an art piece that expresses it in the way yours did and so
well. I am truly impressed with your image. Thank you. —K
(Message Id: S2-924DK)

R, I envy your clarity of thought and positive conviction. You create poetry on
canvas. Keep on kicking ass. —M
(Message Id: S2-948DM)

The message below is another example where C reflected on her own professional
belief while commenting on her partner’s project proposal:

Dear E,
Your final report was much more specific, you’ve really stuck it out and worked
through the whole process. I think you could continue this into a masters project.
Although, I’m not sure how you feel about that. You made a quote in your final
report that stuck out to me, it is, “what steps an artist takes to research a subject
before completing his or her own artwork.” What a valuable lesson for kids of all
ages. If your kids are like mine, sometimes it’s like pulling teeth to get them to
work through the process. It reminded me of actors that sometimes research roles
for months prior to anything going on film. What you accomplished with your
youngsters is valuable and will stick with them. Congratulations!! I look forward
to seeing you in July. —C
(Message Id: W3-674DC)

Since this virtual community was geared toward making meaningful connections
between theory and practice, making professional judgment on quality practice was
important. When a student made excellent points about theories in light of his/her
practice, other students could see the connections, though the ideas may not be applicable
to their own practical situations. Compared to the traditional face-to-face classroom
where academic rigor is judged by central standards, this individualized assessment
seemed more likely to encourage teachers to become aware of their own strength and
weakness in their practice. As members were able to make assessment of their peers’
ideas in connecting theory and practice, they became better judges of themselves when
connecting theory and practice. When a student viewed fourteen other versions of
connecting theory and practice, he/she was likely to become better at re-interpreting theories in relation to his/her own practice.

This is consistent with what Greenwood (1991) argued when he expanded the notion of “reflective practice” by adding the elements of pluralism and diversity. He argued that reflective practice should benefit from collective effort and multiple perspectives. This is what had occurred when students became interested in learning about their peers’ reflections and eager to share their own.

Further evidence of the students’ becoming better assessors was found in their survey results. Most of them described how they had identified certain members in the community whose coursework and comments they would browse first, because they saw consistent qualities in their coursework. Interestingly, those who were being identified as most respected peers were not a fixed small group, as one might assume; rather almost every student was named on someone else’s “most respected classmates” list. This further indicates that, in the online community, assessment criteria were not fixed, and that students learned to become more critical assessors. Moreover, the open access to everyone’s academic performances in assignments made collaborative learning stronger than in a conventional face-to-face classroom. In this online group, there seemed to be no dominant personalities in peer learning as there often are in a conventional classroom. Almost everyone came to recognize that they could learn something from each individual’s contribution.
3.6.3 Community interactivity enhanced online learning

In the literature, there have been studies showing how important community interactivity is in supporting genuine group discussion and critical thinking. McIssac and Tu (2002) found that strong online social presence was the key to productive interactive discussion. They defined social presence with three dimensions which were related to the nature of the computer-mediated communication setting: social context, online communication, and interactivity. They referred social context to elements including task orientation, privacy, topics, recipients/social relationships, and social process. Their qualitative analysis of online questionnaires found that “an increase in the level of online interaction occurs with an improved level of social presence” (p. 131). This level of social presence was important for motivation of learning, and also intellectual discourse. Most students indicated in the survey that they developed social presence in the online classroom which they had not expected prior to attending this program. This resulted in more active learning participation in community discourse. About nine out of the fifteen students admitted that their social presence in the online classroom was greater than in face-to-face classroom. As a result, they felt they had learned much from the online interaction and learning.

When a strong social community developed, community interactivity made online negotiation on issues more easily. Jeong (2003) found that “interactions involving conflicting viewpoints promoted more discussion and critical thinking, and that evaluation of arguments was more likely to occur as conclusions were being drawn—not as arguments were being presented” (p. 25). Jeong’s and many others’ research on this
Based on the textual dialogues, when disagreement or debates occurred, I saw how people used their words more carefully—which indicated they were more conscious to control the impact of their expression. Besides, they posted more reflective and critical evaluations of the debates at stake, instead of simply leaving the arguments unchanged without coming to a resolution on meaning. This negotiation, a process of re-explanation and re-consideration of different people’s positions, manifested a community’s inquiry process. Rather than as individuals simply letting out emotions or asserting positions. The comments of people read like they wanted to understand why people think in certain ways. In other words, they wanted to understand each other better and hoped to be understood as well. One student noted on her survey response that “…[after the summer meeting finished], when we left to go back ‘out on our own’ to do the online coursework, I felt a little alone, and was afraid to raise views that were not the majority, but I did it anyways and I got over it…” Other students expressed a similar sense that they felt more at ease to offer different perspectives after they felt secure socially with the group.

3.6.3.1 Raising disagreement and debates

Next, the evidence of how community interactivity enhanced learning is illustrated through four kinds of learning interactions: 1) raising disagreement and debates, 2) reflecting on one’s own deficiencies, 3) embracing diversity in discourse, and 4) encouraging openness.

The degree of maturity with which virtual communities handle conflicting
viewpoints, disagreements, controversial issues, and challenging debates can be seen as a benchmark to evaluate its interactivity on intellectual discourse. This online community was willing to deal with disagreement. Their high level of tolerance for temporary disharmony in ideological debate allowed them to feel safe to raise and debate sensitive issues. They were able to voice different opinions without losing their social bonding.

The following three examples taken from different conversational contexts illustrate this kind of discourse:

Dear Q,
I have to disagree with your point. As I have mentioned in my response to this article, I teach in a school greatly affected by poverty. Almost half of my students qualify for free and reduced lunch and of that number almost all of my black students qualify. We have been marked as failing by the state because our black students are failing the state tests. After reading this article I sent it to my principal, assistant superintendent of curriculum and the district superintendent. They all found it fascinating and reconfirmed our districts need to provide addition opportunities for students and their parents beyond the regular school day.
—C
(Message ID No. S2-559DC)

Hey Q, Q, oh Q,
…the idea of syncretism isn't quite so bad as one might think—although there seemed to be a lot of opinions about that on the websites I saw. Many people want to keep their religions "pure" but there is absolutely no way to do that. Think of all the pagan ideas that are intermingled with Christian holidays—Easter eggs, the Easter bunny (what's that but a nod to fertility??) With the way it is going these days—I would say it would be healthier and behoove us all to take what is good in every religion. I think present and past history have shown us that striving for "purity" leads to subjection, violence, and death. I respectfully and wholeheartedly disagree with you, but that's okay, I'll still drink beers with you. —S
(Message ID No. S2-85DS)

Hi, P,
I guess I'll keep it short and sweet. Mapplethorpe’s images are just dandy as far as still-lifes and nudes go, good work by any photographer, but very derivative of others from the past. Nothing special to me. His homoerotic work has a high shock value that I find just too easy for an artist. It is cheap and simple and serves
as a record for his personal lifestyle...but fine art? I don't see his work as anything extraordinary. In a professional setting, it allows us to talk about censorship and ethical/moral boundaries. I devour photography books and images online. It's something I have done prolifically for the past ten years. Mapplethorpe’s work is okay, but not that big a deal. —D
(Message ID No. S2-463DD)

3.6.3.2 Reflecting on one’s own deficiencies

Here are some examples in which students admitted and critically reflected on their own deficiencies, such as honestly reflecting on their own stereotypes. O wrote:

Hi, R,
Regarding your comment, about 'the parts we don't like in other people that we see in the mirror and learn to accept or dislike more." Those thoughts come from deep inside. For lack of a better analogy, I think each of us has the angel on one shoulder and the devil on the other, and as each one whispers their thoughts into our ears, we have the choice as to which voice we listen to. Recently I have been looking at my 38-year old face (and body image) and I have not been pleased. But when I look at what I am thinking and creating and being for others, it all has a place and purpose, and I am trying to accept myself for who I am and not dislike myself for what I look like. The self-esteem issue doesn't end at puberty. It's an ongoing process of aging. I loved N's comment on being able to "get away with" wearing a funky "artist" belt. That is SO typical of the image of the Artist. I say we Go For It. Milk it. Enjoy it. WE, of all people (no matter how Christian or conservative, or liberal we are, are given "permission" to be excessive and extravagant. People expect it, and almost crave it. So Be Bold Art Teacher! I'll try to do the same. Love. —O
(Message ID No. S2-642DO)

…A picture is worth 1,000 words. I really enjoyed this video and it provoked a lot of thinking for me. Q: Do I have a bias toward any accents or dialects? A: My biggest bias toward accents and dialects is toward the “southern dialect”. It’s probably one of my biggest biases and, in this way, marks this entry as almost a confessional… As a “Northerner” I’ve always felt a strong bias toward southern accents and, as the lady from Texas said, southern accents were stereotyped to ignorance. I think that this may be true, but mainly because of associations with values and the economic system that prevailed in the south which was based on others (black slaves) doing for you, rather than you doing for yourself, independently. This is a kind of “Northerner” pride and definitely a German one. Being German, that has been a very grounded bias. I find that I don’t want to
move any farther south then where I am (Columbus) right now. Recently, however, we went to North Carolina and I enjoyed the islands along the Outerbanks. I’ve overcome other biases, but this is one I still struggle with and it is language (dialect) derived… —J
(Message ID No. S2-646DJ)

…To add to what you both already wrote, I think the media plays a part in our perception of accents and the sensuality of them. The French are always depicted in one way, and the Irish are depicted another, etc. Right now, with the fighting and war overseas, I cannot help but feel unease when I see or hear a man (or woman) from the Middle East walk into the room. The images that we are exposed to and the media that we are constantly being bombarded by all shape our biases (as we already discussed). No one is exempt from our visual culture. —K
(Message ID No. S2-713DK)

3.6.3.3 Embracing diversity in virtual discourse

The productive discourse also allowed for embracing of diversity and multicultural understanding toward each student honoring diversity was another major outcome of building the community. The result was a greater cultural understanding and continuing negotiation of differences. The quote below shows the student’s recognition of other members’ diverse school and cultural contexts as she described her own. K wrote:

Dear L,
That is what is so neat about this class. There is such a diversity of issues and problems to contend with. Where as you teach in a predominately white and Christian school setting, I teach in a predominately black and rough neighborhood school setting. Language is not as much an issue as racial tension and prejudices in my school. Our group was asked to speak about how our school promotes racial awareness or how we integrate diversity. My school is very structured and works hard to create solidarity and making students equal, no favoritism. Because of the strict structure, students know what to expect and racial issues are minimized. They wear uniforms, walk on the right side of the hallway and sit silently during indoor recess. It is a very controlled environment. How does this promote diversity? It helps students see that everyone has to follow the rules and it still helps students remain individuals in the classroom. I guess it is my job to
create cultural awareness. Go art! —K
(Message ID No. S2-717DK)

The next quote shows that the student tried to get the group to think about issues of representing Arabic culture. On the surface, her response to another member’s comments sounded exciting because of the different perspective being expressed. However, at a deeper level, this response indicates that she invited her fellow American art teachers to evaluate issues of the representation of Eastern culture from a different perspective. She felt comfortable to throw out sensitive questions and hope for critical responses from the other end of the computer screen. She said:

Dear J,
CONGRATULATIONS!!! You are the first person to address this in this class (other than P and I [who were the two American teachers teaching at Saudi Arabia]). I was just telling P, that I was really surprised how everyone so far seems to avoid talking about Arabs. There is so much fear, so much mistrust about this particular group and it’s this very culture that we as Americans need to get a grip about the most. Even before 9-11, Arabs have been treated, I would say, with extreme bias in our country's media. Before I moved over here, the only Arabs I knew from the movies and TV were Omar Sharif, Anwar Sadat, Muammar Khaddafi, Saddam Hussein, Yasser Arafat and the Shah of Iran—that's it!!! So that's basically "Funny Girl-Nicky Anrnstein, three dictators, a terrorist leader and an assassinated President. Flip that—can you imagine if all we knew about the Western world was three dictators-hmm, Hitler, Stalin, and Mussolini, John F. Kennedy and David Koresh. There is a whole lot missing, don't you think?? It is a tough culture to identify with but there must be ways to make connections… I am starting to figure out the cultural structure a bit more and to understand some of the basic motivations of the average (non-terrorist) Muslim.
—S
(Message ID No. S2-722DS)
3.6.3.4 Encouraging openness

Students’ openness to ask questions without feeling intimidated illustrated another dimension of productive learning interaction. The quote below expresses student B’s conceptual uncertainty and a continuing quest for better answers in teaching. Through this expressed uncertainty, she was opening up for others’ insights and perspectives. Postings of this sort were commonly found during the second year of the program. D wrote:

Dear P,
I think you have defined the great battle we have all been fighting within these discussions... When is it too much and when is it not enough? Each of us has been at a different point on this continuum depending on our own personal teaching philosophy. The amazing thing about the US is that our beliefs and rules become a Catch 22, on one side we have the right to say and believe what we choose, but on the other we can't say and do what we choose because of how it may affect another. We have so many freedoms that it can create barriers. I don't know if I am explaining this well?! Example: the radio stations can play what they want as far as music is concerned, but when listeners here complained about the Dixie Chicks being played the stations stopped playing it. Is that censorship of ones ideas, or a radio stations right to not play, or should people who didn't like just change stations or turn it off or should they be polite to another thoughts and ideas? There are so many angles, which is right? —D
(Message ID No. S2-859DD)

3.7 Conclusion: Five characteristics of the online learning community

The discussion in this chapter demonstrates both social and intellectual engagement of this online learning community. Both students’ contributions and instructors’ facilitations provided the grounds and substances in the learning outcomes. Five important characteristics were seen in this particular educational community.

First of all, this group of full-time practitioners was able to collectively construct
connections between theory and practice. They frequently and actively drew their
professional insights and experience to this joint effort. They were interested in learning
others’ analysis and synthesis during such process, because they often referenced the
others’ reflections as the starting point of their own. This collective group reflective
effort was very important for an online learning community.

Secondly, engaging in such a prolonged community made people expand their
learning in depth and breadth. I saw how people were committed to this online learning.
The program’s path to building a trusting network with mutual respect was rather fast—
after the first and second quarter of online courses, the group began to show strong
bonding; yet the time being invested to community-building was considerably longer
than conventional settings usually allow. Conventional classroom learning groups often
establish community trust in a short period of time. But it usually subsides after a course
ends. That is not comparable with a two-year engagement in which everyone witnessed
and learned from other members’ processes. The result was high learning commitment.

Third, participation to the online discourse allowed flexibility and democracy.
And students felt they could be heard to the virtual discourse. This was a very important
factor promoting their willingness to reveal one’s own thoughts and reflect in deeper
levels. Participation to group discussions became individual-paced without physical and
social pressure.

The fourth characteristic is that the learning community had a stronger emotional
impact on people because individual connection was deemed important by the instructors.
A conventional learning community rarely develops into one that affects all individual’s
learning and life at broad levels—intellectual and also affective. One interesting example was that, one day when the Middle West America was struck by a big snowstorm and schools were cancelled, many students logged on to the course website at the same time to talk to each other in the conversation room. They did not log on to do only coursework. This shows their dependence on each other for emotional and social support. For a virtual community that only interacted through online contact most of the time, what more can one ask? Their life in this virtual community had become part of their personal and professional life. The degree of the group’s bonding was due to the frequent and countless exchanges enabled by the anywhere-anytime communication channel of online technology. This facilitation of meaningful interactions among group members led to more intimate understandings of each member.

The fifth characteristic was the display of multiple versions of theory-practice connections. In the context of online professional development, an online learning community plays new roles in individual students’ lives. If successfully facilitated, it becomes an agent to inform the individual’s continuing revision of his/her own practice, The responsiveness to individual’s theory-practice re-conceptualizations is less sensitive in face-to-face settings.
CHAPTER 4

EDUCATING REFLECTIVE ART TEACHER PRACTITIONERS

This chapter discusses students’ reflective learning and the kinds of contexts they had taken place. My approach is to situate the findings in the context of professional development, and then discuss what art teachers of this particular group found important to reflect about. Their content of reflection could help us understand what teacher reflective thinking might entail, and what educational implications could be considered.

4.1 Review of the research on educating reflective practitioners

The notion of becoming a reflective practitioner for better teaching received great attention during the 80s and 90s. It was during a time when teachers’ professional autonomy—acting as a decision-maker rather than as a passive technician to deliver curriculum—was recognized as important in successful teaching. Since then, teacher empowerment has become a major goal of training pre- and in-service teachers. Many argue that reflective thinking and practice is the basis of teacher empowerment (Andrew et al, 1992; Johnson et al, 1992; Arends, Borko, & McCaleb, 1992; Applegate & Shaklee,
Historically, this philosophy about teaching is not new. Educational researchers attribute the earliest conceptualization of reflection-based practice to Dewey (1933) and the next major wave of theoretical attention to Schön (1983). It was during the 80s and 90s that reflective teaching became a subject for study and research. More sophisticated frameworks and empirical studies accumulated. A scholarly multi-professional journal called *Reflective Practice* was created in 2000. Its purpose was to provide interested audiences opportunities to share their research on reflective practice. The audience includes educators of healthcare professionals, teacher educators, management educators, etc.

Reflective thinking, rather than the acquisition of skills, has now become a major emphasis in the training of professionals. It is accepted by many—but by no means all—that teachers’ abilities have to do with what they think and reflect about, before, during, and after action. Reflection in this context usually refers to thinking about a teacher’s persona practical theories and judgment on the contextual variables that are significant to his/her teaching situation.

As this model became popular in the field, several models were developed in an attempt to determine how best to accomplish this goal (Valli, 1992). This did not go easily. The more people contemplated the more problems they found that demanded clarification. Still today, differences about what reflective thinking really means are still not settled.
Tabachnick and Zeichner (2002) attributed this to the different schools of thought in teacher education more generally. They say that different versions of reflective teaching represent different frameworks within the practice of teacher education. They developed a model of the similarities and differences in conceptualizations of teacher reflection. It included four versions of reflective thinking. They said:

… [different] priorities are established about schooling and society that emerge out of particular historical traditions and educational and social philosophies. None of these traditions is sufficient by itself for providing a moral basis for teaching and teacher education. Good teaching and teacher education need to attend to all of the elements that are brought into focus by the various traditions: the representation of subject matter, student thinking and understanding, teaching strategies suggested by research conducted by university academics and classroom teachers, and the social context of teaching. (14)

Here are some broad definitions of the above four traditions. In the first tradition, reflection focuses on reflective applications of subject matter to practice. In the second tradition, reflection focuses on the facilitation of student thinking and development. In the third, reflection focuses on the use of available teaching resources and strategies. The fourth focuses on social reconstructionist approaches to promote social justice. These models present overlapping educational philosophies, and they informed my initial analysis when I studied the online postings. They helped me sort out which themes and dimensions of reflection were important. During my program observations, I found elements of all four of these traditions.

4.2 My approach to reflective learning

In my categorization of data about reflective learning, I read every posting available in the eight online classrooms, and scrutinized them for their significance in this
regard. After the postings were taken out of the context of each course site, I looked for recurring topics or foci of reflection. I looked for emerging categories of the content of students’ reflections. This method is often used in researching people’s reflective thinking and learning (Merryfield, 2003; Reimer & Stephens, 1993). In the end, I came up with the following five categories that spoke to the significant reflective learning found in the program.

1. Reflection on content understanding
2. Reflection on personal context and professional experience
3. Reflection on research inquiry as a teacher researcher
4. Reflection on art education as a profession
5. General reflections

One clarification needs to be made. It is about the context in which a reflective thinking is presented. In teacher education, reflective thinking as thinking strategy encompasses more than what it means in ordinary language. It can take place in complex ways. It is a deliberate thinking process about professional practice. In a posting where reflective thinking was demonstrated, students often referred different factors or perspectives from which they derived the reflections. In other words, they would give a context to illustrate their points of views. It was a rare case that they would only make a remark and then leave it unexplained or unsupported. Thus, because of their elaboration on providing contexts to support one’s assertions, I needed to let the message speak from its original contexts as intended by the author. For such consideration, a detailed context is needed. Moreover, as reflective thinking was seen as a transformational process by many researchers (Brockbank & McGill, 1998), reducing message length might make the
transformational thinking fragmented. And consequently, it would lose its power in illustrating what I argued.

Last but not least, some clarification must be made about possible misconceptions of my data presentation. The program lasted for two years and the eight online course websites recorded how the students developed their reflective learning in detailed, content- and context-specific, and personal ways. This resulted in an enormous amount of information posted and I needed to sort out only those quotations that were representative of reflective thinking. I do not claim that every piece of writing posted in the program illustrated reflective thinking.

Neither did reflective writings grow in a steady fashion in quality or frequency. Generally speaking, reflective writings were less frequent at the beginning of the program and later in the program, especially during its second year, they were more frequent and constructive. But this is true only in a very general sense and there were many contextual factors: the frequency of reflective writing varied from person to person, from course to course, and from context to context. Other factors also affected the frequency of constructive reflective writings. For instance, particular students might have less time available in a particular course due to other life obligations. This would make their reflective writing less frequent than those in their other courses. Or, when people were particularly interested in an issue, they wrote more and reflected more. Those who did not write as much on certain topics but still followed the discussions could also be said to be engaging in reflective learning. In a quiet way, one could say. Students reported in the survey that they frequently checked for new postings when they had time, even when
they did not respond much. The point is, the examples given here did not come equally from all students or courses. However, I tried to illustrate my findings and observations with extracts that were representative of the entire group. And when data were similar, I tried to select data from everyone to include all voices when possible.

4.3 Discussions of findings

4.3.1 Reflection on reconstructing content understanding

In this section, evidence of students’ reflective thinking regarding the online course content understanding is presented. In these kinds of examples, one could easily see the interconnections, because students reflected with clear references to their new learning.

4.3.1.1 Example 1: Identifying theory-practice connections

People wrote frequently on connecting their understanding of content to classroom situations. The connections they made might be straightforward identifications of similarities or differences they realized between new learning and classroom contexts. This kind of reflection was frequent, and easily spotted in the discussion board. Their reflection could be as simple as this one:

I was writing in my journal today and I expounded on the subject of multiculturalism. I never realized how encompassing the term is. I was starting on a tirade about prejudices and biases in the classroom. —B (Message ID No. W1-291DB)
4.3.1.2 Example 2: Reflecting as Questioning

There were also examples that were more complex than the previous one. For example, their reflections may end with more uncertainties in light of content understanding. On such occasions, students would write with a questioning format. They addressed the questions not only to themselves but also to the community. In the following example, student C reflected on her new understanding of multiculturalism again but expanded it to her views on education and her role as an art teacher. We see deeper connections here between content understanding and professional practice.

Perhaps the most significant reflection is at the end, “…since this class, I have begun to question my own teaching and those of my colleagues….” This is evidence that a new content understanding initiated new re-construction of her self-knowledge and of her own practice, though the solutions were not yet there. She wrote:

…This now leads me to the discussion on multiculturalism. Our classrooms should be representative of what the world should be like. In our attempts and successes of trying to be good art educators, we have filled the curriculum with a comprehension of diversity through art making lessons. Since taking this class, I have begun to question my own teaching and those of my colleagues. Are we teaching to the white culture and doing art-making lessons that are not inclusive. Are our multicultural attempts feeble and superficial? Are we just trying to cover the curriculum? I ask these questions, as I look deep within my own self and those of other teachers. —C

(Message ID No. S2-212DC)

Similarly, P quoted below re-examined his professional purposes in light of his new understanding of multiculturalism and visual culture. With a similar degree of openness and honesty as shown in C’s reflection, P revealed his uneasiness when facing the tremendous challenge of multiculturalism. He recognized the society’s pluralistic
trends but felt uncertain what was best for his students to learn. One can sense the sincerity of this reflection in his display of weakness in front of his professional peers. As the previous quote, the value of this reflection is in questioning his current practice and underlying philosophy, given the new issue learned. He wrote:

…What I wonder about is if other approaches being promoted in art education are as accepting. Visual culture seems a natural for multiculturalism until the complexities of why one culture views an image as art and another culture may not, are considered. Can art be separated from culture? Whose culture is critical, the viewer or the artist, or both? I keep coming back to that horrible question of how we define art. How art was taught in the past seems quaint by our current standards but at least there was general agreement on what it was. In a postmodern society how can we be sure we are not teaching art history (perhaps historical art is a better term) and calling it art education? What should be taught to tomorrow's students in order for them to comprehend the things that will be called "art"? —P

(Message ID No. S2-234DP)

In the online classroom, such kinds of reflective questioning often invited more questions from the other students. This made reflection a group effort. Often in the online classroom group reflection evolved around different corners or issues but still stayed in the same boat. Everyone approached the same issue from a slightly different angle. This made the dialogues continue and become lengthy. This again showed an important advantage of online discussion—reflective dialogues developed further than they would in a face-to-face classroom. The quote below was a response to some reflective questions posted by another student who argued on her view of ethnicity.

Student N replied:

I don't think that this has changed my definition of ethnicity per se, but it has broadened my view of what characteristics go into creating ones ethnicity. It isn't just your country of origin, but the religion, traditions, and values of the group you belong to… —N

(Message ID No. S2-71DN)
4.3.1.3 Example 3: Formulating strategies of teaching

Many times, students’ reflections demonstrated their process of formulating new strategies. In the following example, student S connected her past experience with new content understanding, and then put herself in her students’ shoes to contemplate better strategies for teaching. This reveals her process of reasoning new strategies to address problems she found in the past. We saw a transformative process here—her new understanding contributed to her modification of practice. The quote reveals this process as she formulated an alternative theory. She wrote:

Two major ideas resonated for me within Chapter Four “Judging Student Art”: judgments can’t be merely baseless opinion and that artist involvement can be a justifiable foundation for evaluation. As I take this course, I think more and more about the higher thinking skills that are used within the art classroom. As students evaluate in a critique, they are arguing, comparing, contrasting, justifying their responses, explaining choices, and becoming more discriminating viewers. They are doing this in conjunction with learning how to paint, draw, carve linocuts, and manipulate wire, wood, paper-mache. It is amazing to think that this is one of the first things to get cut during budget cuts. When I was student, critiques (when we had them which were rare) seemed to praise the obvious, to exalt the talented, focusing on the work of a small group in the class. I don’t think our critiques focused on involvement but on technical proficiency. I always felt like the people who were not already somewhat confident about their art didn’t stand a chance at success. Now as a teacher when I lead critiques in class, I remember the past and try my best to go around the class focusing on everyone. The chapter suggests that in order to have a more in depth discussion, it is better to respond to several pieces at a time, NOT to try to talk about everybody’s work. I think this is a helpful suggestion as each project may or may not strike a chord with each student. As far as what I would like to try in my class—I would like to have a critique based on artist’s involvement. This past two weeks, we have been doing drawings from observation-drawing plants in fact but composing them using ideas from Asian Art (diagonal composition, selecting portions of the plant, using the sides of they paper more so than the center.)… —S

(Message ID No. B2-PRO-S)

The importance of this piece of reflection also rested on her plan to modify her practice in art critique lessons that she had felt vaguely uncertain of before. It is a sign of her
reconstructing prior knowledge and experience for better understanding. At the end, she also described how the change worked in her classroom, and she sounded more confident in facilitating meaningful not judgmental discussions with her students about their artworks.

Many times people started from describing the situations or problems that they encountered. This signals why the reflective thinking was initiated. Here is another example by A where she asked herself an assessment question, and went on to consider the alternatives. In the passage, she said “yes, it can, but…” and “no, it cannot, but…” in conceptualizing the problems. This demonstrates that she was negotiating between different positions in the process of personal theory formulation. She said:

Can a test assess school learning even if it is not closely related to what is taught? This question has been sitting in my craw all week. I have flip flopped… yes it can if it is assessing critical discussion of 2-D artwork… or, no it can’t because the artwork presented for critical discussion may be beyond grasp for the tested. For example, if students have studied impressionism extensively and then the tested are asked to discuss a Pop Art piece… it would be ugly. Or as Eisner stated, the age of the student may get in the way of the technique (writing, discussing, etc.) used for testing. So many variables come into play. —A

(Message ID No. P2-320DA)

In the end, she did not achieve a definitive position. She was trying to analyze different assessment strategies and their different implications. This kind of reflection shows students’ critical thinking and conscious decision-making about content issues.

In the next example, similar reflective reasoning on strategies took place. Here, J analyzed the goal of assessment and its impact on student’s judgment. She reasoned that these two were different things, and one should apply different assessment strategies for
different purposes and in different situations. How can a teacher teach objectively but also foster students’ informed subjective judgment on their own learning? She wrote:

Teaching items that are objective and teaching items that are subjective are 2 different categories. Subjective has no "correct" answers and what I find is telling when they do that part as "self conductive" as possible. In other words, give themselves and each other the assessment. I had my kids pick "the best" out. This gives them the autonomy they need to make decisions and, in most cases, they're on top of their criteria. How do they do it? In the same way they choose the best cover for a book, or the best design for tennis shoes. I'm beginning to think that teaching is just getting students to make connections from what they know to what they don't know and organically build on it, improve it, introduce a new perspective to it, etc. AND, if they throw it away, it's THEIR assessment on themselves. —J
(Message ID No. P2-218DJ)

At times, people displayed more confidence and sounded more affirmative of new found strategies. An example is this one:

One of the goals I have for myself during this class is to build and improve my strategies for leading classroom discussion. I would like to see students develop deeper and to actively discover themselves what is meaningful about work of art—including their own. All too often I feel that my own enthusiasm for talking about a work of art lead to a too passive learning environment in class. My role turns into preacher, promoter, and defender of art rather than a guide for discussion. I would like my preferences and my taste in art to be less of an influence within our class discussions and would like to see the children in class be able to talk about what they believe art to be. I need to build more strategies so that the students do most of the work and to direct the flow of conversation so that the content of class discussions unfold in a positive and significant way, focusing less on judgment and concentrating more on interpretation… —B
(Message ID No. B2-PRO-B)

There were occasions where new content understanding provoked students’ realization of the weakness of their teaching strategies. They indicated that the new
understanding was the answer to their long-held questions which they may or may not admit before. An example here is where J reflected on how she had struggled to find good art criticism approaches. She realized about her prejudice which sometimes overvalued craftsmanship in students’ art critiques. She reflected:

…This chapter more than any other has touched on some areas within the art room environment that I have had questions about and am working on improving. The critique scenario beginning on page 56 addresses the relationship between media and meaning, of how the effect of media can affect the impact of a piece, regardless of the artist’s intent. This particular scenario makes me nervous, as I probably “kid-glove” issues of craftsmanship rather than address them, especially in a public group setting. I wouldn’t want to intentionally embarrass a student for lack of craftsmanship within their piece yet it is important to have the person hear the effect and to learn from others. I am learning about my own prejudices; craftsmanship is just one of many criteria in which to interpret and evaluate a work of art. One can as a teacher and as a leader of a critique honestly address weaknesses in order to talk about its effect on the interpretation of the piece…

—K
(Message ID No. B2-PRO-K)

This kind of reflective thinking on strategy happened more often in courses where instructional methods were the focus, such as in the studio method course, the art criticism course, and the assessment course. They can be seen as exemplifications of Schön’s “reflection-on-action,” which referred to deliberate re-evaluation of professional practice after the event and outside of the teaching context. We saw how people reconstructed their practice in concrete terms or modified their general philosophy of teaching.
4.3.1.4 Example 4: Reaffirming one’s philosophy

Sometimes students’ reflections were a form of affirmation as in the one quoted below. Q was re-affirming the goals and functions of art learning not only to himself but also to his professional peers. This piece occurred in the context of art curriculum design when the group discussed the role of art in the school curriculum. It sounds like a position-making argument, but it also reveals a reflective process. Q said:

I disagree with the assumption that the most important goal of art learning should be “getting better at making art.” As “the most important” learning goal, it is too limiting. Art is more than making art. It is learning how to look at and evaluate the art of others. It is understanding that art is a continuum of ideas placed in an historical context. It is understanding that art influences and is influenced by culture. It is identifying the connections between art and our lives. It is understanding a form of complex communication. It is to wonder why every human group that ever existed produced something we would call art.

Getting better at making art is a good goal, especially if you’re an artist, or looking to enter art school. But I think art is a core subject, which should be learned because it provides a unique and significant insight for all students, whether their passion is accounting or car repair. Most human beings, I suspect, spend most of their lives engaged in art activities generally making choices about style, where to settle their glance, how to understand things, or change perspectives. Art has the ability to bring awareness and even sensitivity to these unconscious choices. —Q
(Message ID No. P2-411DQ)

4.3.1.5 Example 5: Initiating changes and actions

Many times, students reflected about initiation of change of practice or action based on new content understanding. They would specifically describe the changes and where they came from. In such circumstances, we often saw people situating new learning within their prior experience, and then initiating changes that they really
believed in. In this example, O describes how she would use the textbook from an online course as her daily reference to conduct good art critique lessons. She wrote:

With the time constraints, and limited art time, public school art specialist must first see the importance for talking about student art, and then carve out the time for critiques. As this chapter points out, there are strategies for conducting good critiques. I think that with practice, the critiques will become beneficial for all students. It also makes them more accountable for their time in the art room. I am encouraged by this chapter, and plan on keeping this book on my desk at all times. —O
(Message ID No. B2-PRO-O)

The following two reflections occurred in the context of end-of-class evaluations. These two students explained why they changed their teaching and for what reasons:

Making art with meaning by focusing on the big ideas of individual artists was somewhat new to me and affected my practice as both an artist and a teacher. I was challenged and intrigued by the fact that the process of artmaking as described in the text, and by the instructor, could not be easily translated into the elementary classroom. I reflected a great deal on my practice during this course, and even considered writing my thesis on modifications of artmaking with meaning that better apply to artmaking in the elementary classroom. —N
(Message ID No. W2-PRO-N)

…I look at the content of what I teach more closely than I did before. I am careful to make sure that there is a personal connection for each student somewhere in each project. When I give students a chance to make some choices they put forth more effort and turn in better quality work. I look for a reason for students to want to participate and do their best. —B
(Message ID No. W2-PRO-B)

4.3.1.6 Example 6: Reflecting through analogies

One interesting phenomenon that occurred often was that people used analogies frequently in their reflections. This could be seen as evidence of their trying to situate content understanding within their personal theories and experiences. They used
analogies to settle what they thought was important by placing it in contexts they were familiar with. An example here where A tried to make sense of integrated curriculum through analogies:

-When I read that passage in the Efland article, it really made me stop and think. That approach is just a tiny tweak, but it makes all the difference to my thinking. The key idea is like a big feast, and what we bring to the table, in terms of subject matter, is food. When we use the theme approach it's like a potluck. We might end up with 7 appetizers and a dessert. When we use the integrated curriculum approach we can serve up a lovely dinner, with all the courses complimenting one another, and every guest feeling perfectly satiated. I do think many teachers, including me, saw integrated curriculum as some sort of spiffed up thematic instruction… —A
(Message ID No. W1-147DA)

4.3.2 Reflection on personal context and professional experience

This section presents reflective thinking about students’ personal and professional experiences and the relationships between them. The quotes here show their effort to connect the online classroom with their local context and the profession. For example, sometimes students drew on personal experience to make a point about their professional position. Sometimes, it was the other way around. From these kinds of reflections, we see that many of these art teachers were emotionally committed to the professional choices they made. That is, their professional practices and orientations frequently reflected their personal values. Besides, their practice reflected their strong ethical commitment to their students’ best interests. Probably for this reason, they were very open and honest in reflecting on the problems they saw in the practice of art education. I
found that there were six kinds of examples of connecting personal and professional values and practices. They are discussed next.

4.3.2.1 Example 1: Analyzing pedagogical approaches

In this category, people reflected on what they saw as common pedagogy of art education today. Such as the example below by N where she reflected on the profession’s general approach. She said:

I so agree with the idea of teaching children "how", and then creating opportunities for them to apply it... Is this the "when?" In my experience, teachers (of art) do either one or the other, but rarely both. That is, we teach a lot of systematic lessons, but never provide opportunities to apply it authentically and independently... OR, we provide lots of cleverly created art experiences to apply skills (like drawing), without ever teaching students how to draw. —N
(Message ID No. W1-205DN)

4.3.2.2 Example 2: Pondering issues of curriculum and assessment

Reflections that centered on curriculum and assessment issues were a major focus in the program. Probably these two issues were what brought many of the students to attend this online program in the first place. They wanted to improve and became a better teacher, and gaining professionalism on these two issues were perceived by them as important underlying conditions. The following quotes are examples of this kind.

First of all, J reflected on what she perceived as performance assessment:

Performance based assessments?? To me it's kind of like saying, you can talk the talk, but can you walk the walk? YOU'RE RIGHT. I HAVE BEEN FOOLING AROUND WITH “AUTHENTIC” ASSESSMENTS, AND SOMETIMES I FEEL LIKE IT’S PLAYING DRESS-UP. IN MY LAST “AUTHENTIC” ASSESSMENT, STUDENTS HAD TO CREATE ART FOR THE NEW HEADQUARTERS OF “WATERWORLD CORPORATION.” THERE WAS ALL KINDS OF CRITERIA, SUCH AS “THE WATERWORLD BOARD OF
DIRECTORS WANT ONE ARTWORK THAT DEPICTS THE IMPORTANCE OF WATER TO ALL LIVING THINGS.” THE KIDS GOT INTO IT, BUT WHY IS THIS CHARADE ANY DIFFERENT FROM ME DIRECTING THEM TO CREATE A WORK OF ART THAT SHOWS THE IMPORTANCE OF WATER TO ALL LIVING THINGS? —J
(Message ID No. P2-68DJ)

Noticed that she intentionally used capital letters to add emotion to her expression. This was common in postings when people tried to make textual dialogues more alive and emotionally colored. This was not only to convey what one felt but also to call for responses from others.

I reflected on curriculum approach as well. She wrote:

…Having a focus, such as apples for students is positive, but this unit lacks substance. There is no question or big idea on which to place students’ attention. In looking at the criteria I notice that the topic of apples though broad, is too extensive. It lacks organization, and does not point to the essence of what they will be studying. Basically, students are studying a theme instead of a big idea or essential question. While this is a move in the right direction, it does not have the same significance and depth that an essential question would have in a lesson. I know units like this one from my own experience. In fact, during student teaching, we did something similar to this idea. The unified arts staff would have a theme, such as trains, and each teacher would work with trains in their classroom for a period of 4 weeks. At the end, we would have a “field day” and in the gymnasium we would have events all dealing with trains. Another theme we had were frogs. While I thought this was neat that all the teachers would meet to plan cross-curriculum lessons, I can see in looking back that it had little substance past the obvious for the elementary students. There was no essential question or big idea. —I
(Message ID No. P2-183DI)

C followed with a discussion of the curriculum design issue:

Several problems immediately jumped out at me while reading through this unit. To quote a phrase from Jacobs, this unit seems to be a “curriculum smorgasbord” The description of the unit never states the essential question; both Jacobs and Walker cite the importance of this for many reasons. One main reason is to keep teachers and students focused. The lessons around this unit not only seem unfocused, but also demonstrate a forced attempt to integrate curriculum.
Although it does not go into great depth on the extent of each lesson, higher level thinking skills and the investigative nature of essential questions seems to be missing. Every year (to my dismay) I witness a unit like this one. The 8th grade community teachers have put together a unit about the civil war. The music teacher is asked to teach songs from the civil war, I’m asked to cover art from that period, home economics makes apple butter, and the community teachers have a mixture of activities they developed around this unit. —C

(Message ID No. P2-206DC)

These three pieces of reflective dialogue show how students shared their individual context of practice. These kinds of reflection were common in the online classroom. Students seemed to be able to find commonalities and build further understanding on these. Sometimes they saw others’ professional conflicts and realized that these were also true of their own school situations. And other times people tried to come up with different explanations to the common challenges they faced. This was yet another benefit of building a real-time professional network—it made mutual support possible.

4.3.2.3 Example 3: Experimenting with new ideas

In their reflections students frequently came back to the online classroom to announce some exciting changes that they had made in their own classroom. To them, this professional joy was worth the extra effort that they had to make to commit to the online coursework. When the ideas they learned in the online classroom made sense in their local context and worked with their students, they came back to the online community with a voice of triumph. Such as this one:

I had a talk with my kids today about their artwork meaning something to them. I saw light bulbs above so many heads. It was one of those teachable moments that rarely occur. I see so much promise this year with my students and personal growth. This online program is an inspiration. This is what graduate study should be about. I am grateful. —L

(Message ID No. W1-279DL)
4.3.2.4 Example 4: Re-examining practice

On many occasions when people reflected on their own practices they were willing to admit their weakness or not-so-wise practices. They showed openness to reveal the ways they taught and to accept suggestions. In a face-to-face professional development situation, it might be more difficult to admit that one had more room for improvement. This honesty about one’s practice could be attributed to the non-threatening environment of online classroom where one was sitting in the computer alone to reveal without disruption or social pressure.

The literature confirmed this reasoning. As an expert in facilitating online multicultural course, Merryfield (2003) found that the non-distractive learning environment of an online classroom fostered more honest and deliberate discussions. She used online threaded discussion board as a way to facilitate such discussions. She explained,

…Once I started teaching courses totally online in 1998, I found cross-cultural learning taking place that was simply not possible without these new technologies. Although I continue to have concerns about online cross-cultural interaction substituting for face-to-face interaction, I am convinced that online technologies are important tools for teacher educators who value cross-cultural experiences, skills, and knowledge in local, national, and global contexts. (147)

She specifically identified what she found that made online threaded discussion a great tool to foster examination of multicultural issues. Here are her four reasons:

1. Online technologies conceal triggers of difference.
2. Online technologies increase the depth of study and the meaningfulness of academic content
3. Online technologies facilitate immediate and detailed feedback and extended discussion of ideas.
4. Online technologies can create communities of diverse learners and connections to a larger world.
By “triggers of difference,” she referred to race, gender, ability in verbal articulation, dialects and accents, and physical appearance, which normally affect how people are perceived and judged. When those differences failed to trigger prejudices, she argued, each voice is more likely to be heard. These assertions were found true in general in our program outcome, especially in the multicultural course (in which responses were more deliberately constructed). Students seemed to be able to raise sensitive and controversial issues and voiced disagreements. Their debates in multicultural issues were intense but carefully-articulated and argued. It seemed that the online classroom’s non-threatening environment was an underlying factor. This was confirmed by many students in the survey. They commented that the social community together with the safe environment they felt with the group made discussions of such issues easier to deal with.

Merryfield explained why she strongly valued the benefits that technology offered for learning:

When I want everyone to think deeply and synthesize ideas, threaded discussions are best. Over the last 5 years I have seen more complex thinking about course content in threaded discussions than I believe is ever possible in an oral whole class discussion in a conventional classroom. In some ways threaded discussion combines the best of classroom interaction—the person-to-person interaction, the public view and sharing—with the best of writing assignments - incorporation of academic content, references, and time to reflect and organize ideas. When people have the time to refer to references, compose and edit their ideas, and then interact with others over several days on their work, some amazing learning takes place. (156)

I took instructor Merryfield’s multicultural course in the totally-online version and witnessed first hand why she believed in the benefit of online threaded discussions for more sophisticated class discourse. What she meant by benefit, I believe, referred to the
expanded process of thinking that was required in examining complex multicultural
issues. Students needed to have plenty of time to process and make informed judgment.
In the online program, the extended time to process one’s new learning and
understanding was an underlying condition of better and sophisticated reflections.

As the online learning community developed its friendships, reflections on
students’ personal weaknesses or of un-examined judgments became possible. The non-
threatening setting allowed this kind of reflection to grow on sensitive issues such as
culture, politics, gender, and class. They were willing to consider their personal
background and how it had affected their professional values and practices. This was
similar to Ferrara’s (2004) argument that reflective writing empowers people to think and
change, especially in a group-sharing context.

Here are two examples that reflect what Merryfield found in her research. The
first is straightforward. N reflected that her social and cultural background might have
something to do with her choices of life style and more importantly, how they might have shaped her professional practice. She said:

I can understand your frustration. I personally do not let anyone in my classroom
use race, sex, a disability (or anything else) as an EXCUSE for their behavior or actions...
Also, I think by looking at this we learn a little more about ourselves. For example, I love my dad dearly, but he has some very “old fashioned” views about
this world. (Yes, he’s racist) Am I racist? I like to think not, but I have made the
(unconscious) choice to live in a community that is not very diverse. I have only
seen one African American student at the preschool which my son attends.
Coincidence? Maybe, but it’s making me reflect. Two days ago I confiscated a
note from two 7th grade students, the note was very sexually explicit. Yesterday
while discussing this with one of our school counselors, I said, “I’m so glad I
have a boy” I won’t have to worry about this as much. About five minutes later,
while driving home it hit me. Why would I be less worried about my son having
sex than a daughter?? If I have (unconscious) double standards in my own life, I
probably have double standards in my classroom. —N
As this above example shows, students would reflect on the weak side of their own personal stereotypes or prejudices. They also reflected on the discouraging realities of their local contexts. However, these kinds of reflections rarely stayed as complaints only. Often, after negative reflections, people found new perspectives in an affirming voice. The following is an example:

As I began reading Chapter 2 titled Class by Gollnick and Chinn this week and I could feel the division in my school system even more prominently. I am the lowly traveling art teacher. Sometimes I have a room, other times I have a cart and then sometimes I get thrown out of my room for picture retakes etc. As long as I keep the halls decorated with art work by my students, smile and not complain I have done my job. How about taking the aide out of my class for the four MH students because there are not enough aides to go around? How about a principal that writes your yearly evaluation but never enters your room let alone ever ask how things are going? Another thought, how about the classroom teachers who see little value in what you teach? Yet, I never stop trying to give my students the art education they deserve. I know how important my subject matter is in their lives and I try to block out the lowly class distinction I carry. —I

In general, although students were open-minded in discussing personal biases, stereotypes, perceptions, or un-examined judgments, they seemed to construct their arguments carefully to be understood. It seemed that they understood that others might misunderstand sensitive messages or have wrong impressions without the aide of physical presence. The next example is of this kind. It is a series of exchanges where two students reflected together. The first thread was initiated by Q, who discussed how personal background and conceptions could affect reading of artworks. He recognized this factor in interpreting art but tried to find ways to balance understanding and prior
perception, which he called “baggage.” The term “baggage” later triggered a series of reflective dialogues by other members. He said:

We all carry with us a vast range of "baggage" that we started accumulating as soon as we, as children, decided we hated strained peas. As adults we may examine our feelings, and analyze them, and perhaps even see the fallacies in them, but they still color our interpretation of the world. I contemplated this idea and thought about how it affected visual art. Every viewer of an art work will have a different reaction to a particular work based on what they bring before the canvas at that precise instant. Viewing art is not passive; it is an interaction between object and viewer. The works of Rothko and Mondrian came to mind. The minimalists such as LeWitt gave a direction but were hung up on making their statement as opposed to the viewers contemplating their own. In its purest form, I suppose a blank sheet of pure white paper attached to a gallery wall would be the best focus. Would the gallery patron recognize it as art? Would it need a frame, and if so, what type of frame? Obviously a bit of direction would be helpful but how much. I have tried to achieve a direction of the viewers’ thoughts but in a form generic enough to have that persons "baggage" supply all the details. As an artist I found it impossible to not add my own touch. —Q

P related this to his own personal context. On exploring the concept of “baggage,” he reflected that he had been stereotyped and also he stereotyped other people. He said:

I know that I carry some baggage, some biases are easy to identify and accept, while others are not. Out of everything that we’ve contemplated and discussed, I feel that accents and dialects probably affect me the least. Since I first watched the video “American Tongues” I have tried to search my memory of any time in my life that I have stereotyped a person based on their manner of speech. I can not think of any instances where this has happened. I agree that it does happen, I’ve heard stereotypical comments based on accents, but I don’t think they’ve had a great effect on my personal identity.

Maybe it’s an obvious stereotype to bring up, but I have been also guilty of stereotyping and being stereotyped based on my occupation. The first year I was teaching in my building I had an administrator, make a comment to me about being an artist. More times than I care to admit, people categorize me based on my profession, as an artist I must stay up all hours of the night, live on the wild side, sleep in late, etc... —P

M joined the dialogue and admitted her long-term bias toward people with accents from
big cities. She said:

   Just as R stated I tried to rack my brain and remember if I had any biases toward accents or dialects. To be honest, I used to think that when I heard a New York accent that I should be prepared for a pushy sort of person. Columbus was kind of a slow moving, warm Midwestern town and New York was the big city that was fast paced and people were always in a hurry. I realize now that there are plenty of wonderful people in New York and though our accents may differ we are all people. —M
   (Message ID No. S2-610DM)

Creating a different thread under the main topic of “baggage,” A approached the examination of personal biases toward dialects and accents from another angle. She used the problems of translation cited by scholars as an analogy to reflect that her decisions to interpret cultures could be inadequate at times. She said:

   Throughout this week’s reading and viewing I was examining my biases toward accents and dialects… I suspect much of our experience informs our biases… A lot of the reading this week, made me think about translations. We’re constantly translating what people are telling us, even if they are speaking our own language… Douglas Hofstadter, is a cognitive scientist and translator. He wrote a beautiful epilogue to a book called The Analogical Mind (Gentner, Holyoak, Kokinov, 2001), and it’s worth the price of the book just to read it. In the chapter, he provides 7 very different translations of a verse by Pushkin, which exemplify the different decisions a translator will make. The translator will focus, in differing degrees, on meaning, structure or tone. One may sacrifice a rhyme to achieve meaning. Another may drop an alliterative pattern here, but add it later to fairly replicate the use of that poetic device. “This is typical,” he writes, “of the multidimensional internal conflicts that occur routinely in translations, and each time, one has to weigh all the factors and make a decision.” I keep seeing myself as a translator of language and culture. I wonder about the decisions I’m making when I finally settle upon my translation. What do I think is being communicated to me? What do I sacrifice in the translation? —A
   (Message ID No. S2-611DA)

Days later, K continued the discussion on personal bias. After examining her own biases in general and their effect on her teaching strategies, she realized that they
had some effect on her students as well. She said:

In the beginning of this course I was interested in how my beliefs and biases affected my teaching. Now I am more aware of how my students’ beliefs, multiculturalism and even biases affect student learning.

As was mentioned in the first article, we often think of a person’s culture only in terms of ethnic heritage. I thought that I was doing my part in providing a multicultural curriculum by making sure I included studies of art from major ethnic groups included in my class. I developed units on Africa, Asia, Mexico and even Australia (when they hosted the Olympics) over the years. Objectives in my lessons included comparisons of cultural groups, discussions dispelling misconceptions about a particular group and conversations about spiritual beliefs. I never realized a major element was missing: meaning. —K

(Message ID No. S2-945DK)

In summary, during this kind of self-examining, people explored both personal and professional experiences. However, while touching on different experiences, they remained on the same boat and added multiple understandings through multiple contributions. In an online classroom like this, many experiences and new understandings were brought to the group without sacrificing any point of view. As the students said in the survey, they were able to say what they had in mind without worrying about being rushed to make a point. And many also felt they expressed themselves through online interaction and discussion more than they would have in a face-to-face setting. They could spend as much time as needed to edit before hitting the “submit posting” button. Therefore, discussion in the online classroom was more likely to offer diversities and depth. It also accommodated people’s different learning paths.

4.3.2.5 Example 5: Providing a comprehensive synthesis

A different kind of reflection occurred often when students reflected on their course learning as a whole. They demonstrated that they had developed meaningful
theoretical understandings and practical applications through their involvement with the
course content, peer discussion, and instructor’s instructional activities in very concrete
terms. It was a synthesis of their learning experience obtained from the online classroom.
The synthesis was often comprehensive in its dimensions. And they often ended their
evaluative reflection by describing in detail the changes they made in practice. **B**, quoted
below, reflected how she benefited from course materials, and gave an example of how
this changed her teaching practice. She said:

> It is so difficult to choose only one idea. I have gained so many great ideas from
this course. The most helpful ideas came from classmate communication and the book, *Talking about Student Art*. I also gained a lot from reading quick writes and careful writes submitted by other students. I would have to say… the best idea

was found in Terry Barrett’s *Talking about Student Art* book. Chapter 2 describes an assessment critique on Batiks. The reason I chose this idea is because I have been teaching a lesson on paste batiks for my arts exploration classes. When I first began teaching the lesson, I gave students the history of batiks, but never really thought of going back and having students verbally review the lesson at the end. Once we had finished our batiks, we talked about how they turned out, and had a short discussion about what we liked/disliked about the lesson. However, I did not have the students go back and verbally retrace the history of batik, and the steps we took to complete the lesson. Since reading the assessment critique on batiks, I now perform this assessment at the end of each batik lesson. I am amazed at how much information the students can recall from the beginning of the lesson, to the end of the lesson. I plan to use an assessment like this on other lessons as well. Sometimes as art teachers we get so wrapped up in completing the lesson physically, that we forget to challenge our students mentally. I’m glad this idea was presented and described in chapter 2. —**B**

(Message ID No. B2-D-B)

The next example shows how **C** reflected on the effect of course learning on her
practice from a broader perspective. After this same course, she became more aware of
where art lessons went wrong and was able to modify her strategies for students. She
was able to identify the problems during an unsuccessful instruction and tried to solve them. She said:

I would say before I took this course we had discussions in my classroom that were somewhat shallow. Accompanied by several visuals, I would explain to my students the art making activity, possibly never again conversing about the subject. There were a few times I initiated a student critique when I felt my students were truly inspired by the activity or were totally uninspired. After just a few short weeks into this course, I began to initiate a whole lot more conversations with my students. We would gather by my easel and I would pose a question about a certain artist and their art work and the conversation was amazing. Deep, thoughtful and emotional comments that who would think such a young student could ponder. Through these conversations, I have seen a tremendous growth in my students thought processes and their ability to visually explore. Often, I pose a question and if I feel that there are students who are not communicating, students return to their art tables with paper and pencil and I ask them to write what they are thinking. We then return to our conversation gathering and I ask a reserved student to read what they wrote. This has opened up a lot of the bashful, unconfident students to become active in our conversations. —C (Message ID No. B2-D-DC)

These kinds of evaluative reflections were powerful in revealing the outcomes of online professional development, because the changes were recognized and articulated by the students themselves that were specifically related to their individual practice.

4.3.2.6 Example 6: Debating professional issues

As this was a diverse group in backgrounds, not surprisingly people would have different positions on professional issues. Therefore, debates, arguments, and disagreements of different viewpoints on such issues were commonly seen in the online discussion. Yet, differences of opinions do not have to be cause of arguments. At times they were also reassured and/or excited by each other’s diverse ideas and alternative perspectives. This section presents two series of examples of these two situations. The
series were developed through adding threads of conversations by different people at different times.

In the first series, the question was whether “the most important goal of art learning should be getting better at making art.” L argued that:

The third “that the most important goal of art learning should be getting better at making art” is a statement that, although I am a strong proponent of art production, I have to disagree with strongly. Although artists and students propose this goal it fails to recognize that the making of art is an action or culmination of a number of factors that every artist brings to bear on an idea she/he wishes to express. Getting better at art making implies an improvement in craftsmanship. In our post-modern art world craftsmanship is an extremely variable component of art. Warhol’s miss-registered screen prints can be considered art as a direct result of intentional poor craftsmanship. The goal, if taken in a broader context might include improvements into the matrix of factors that the artist brings to the creation process. Thus, art history, criticism, philosophical or aesthetic considerations, and a myriad of other factors, are portions of the creative process that consciously or subconsciously an artist uses. —L

N held the same view but gave a different perspective in his follow-up:

I think that “that the most important goal of art learning should be “getting better at making art,” would be an inaccurate assessment. How can one understand how to make their art better without learning about what art is created from? There is so much more to art than just making it. I just explained that to the faculty of my building last week. Students need to understand how to create meaning in art, learn many techniques for creating art and they should have some understanding how the elements and principals can have an effect on the finished product. I think that talking about and looking at art can be as valuable an experience as making it. It can help students to generate new ideas can help them to decode the visual world around them. Plus talking about others who have created art before them can show students the great variety of ideas and styles that exist in the art world. If art is just about making it would exclude a majority of the population who may feel unsuccessful at art. It takes just as much effort and learning to look at and evaluate art as to create it. —N

These two students made it clear that they disagreed that “the most important goal of art learning should be getting better at making art.” They objected to the statement as if their
answer was self-evident.  P added a different approach.  He brought the dialogue to a more analytic level.  He did not settle for a clear-cut position as the previous two did.

Instead, he reflected on the context of this statement and its conditions, and discussed its instructional implications.  He said:

The most important goal of art learning is "getting better at making art".  I realize that as an art maker myself, this perception may seem a bit self serving but here's where I am coming from.  As art teachers we are tasked with helping all of our students to reach their greatest potential as artists.  Most of us believe that all students have a creative soul and that they can produce art that is meaningful to themselves and others.  Everyone has something to say and art can be their voice.  The goal of art learning is getting better at making art but in order to do that we as teachers must first be able to assess student art and in order to do that with any validity, we must understand the strategies that measure expressive outcomes, because that is where art lives.  I don't mean to say production is more important than the other disciplines but if we are to convince our students that there is merit in art and especially post modernism, we should help them to recognize that they are active students through their thoughts and perceptions as well as their physical actions.  I linked these statements to essential questions with art education taking the role as the big idea.  Individually, the merits of each statement can be argued at some length but the strength of each depends on its relationship with the others.  I believe this was a trick question put upon us by the powers to be (probably someone in the Bush administration) in order to divide us, make us quibble and argue while they quietly slash arts funding.  Anyway, that's my story and I'm sticking to it, unless I happen to be wrong.  ––P

(Message ID No. P2-442DP)

His arguments invited still another student’s reflection.  K wrote:

You have great points!  In fact, most days while I'm prepping art materials for another batch of "little ones" I'm thinking that very same thing, (that thing you said about our task being to help students reach their potential as artists) but by the end of the day, I'm thinking...."I'd rather be carving", or, depending on how draining the day was, is it miller time?  We (ASD Art teachers) have to detach ourselves from the artist self and become the art teacher for the day.  It would be cool if I could teach art by being an artist.  Maybe you are in a situation that allows you to do that switch over more easily.

We (you and me) are in entirely different art teaching positions, in fact, maybe polar opposites, but I believe art educators are tasked with something more like what L said, "the most important goal of art learning should be getting better at understanding art."  And in my case, it is more important that they walk away
from their elementary art experience with a broader sense of the world around them, than on their artistic ability. I don't have time to focus in on any one student's ability. I am looking at art for them as a varied, broad, and exciting thing. Hopefully a place for them to see potential in themselves and the world. I wish I was in your shoes for one day, because if the kids came to me 'ready to improve themselves as artists' specifically, (instead of me having to include the teaching of social skills like sharing, in there as well as drawing a pattern) then I would be walking on clouds... —K

(Message ID No. P2-462DK)

These kinds of interactive reflective dialogues demonstrated the active thinking of students’ reconstruction of their knowledge through collective effort. And such prolonged process of conceptualization was made possible by the asynchronous interactions, which gave more opportunities for deeper reflections. These threads did not happen in one hour, one day, or one week.

Next series is a second example of an interactive reflective discourse. Here, students collectively reconstructed their understanding of different positions of art educational practices. Each student conceptualized the issues with different perspectives.

A said:

Where are we heading with art education in 2002? Buzzwords and curricular ideas fly by us and disappear, only to be replaced by the next buzzword and “new” curriculum that takes precedence. I think Efland’s article is contemplative and seeks to define where we may be headed at the present moment. Visual culture is a force that must be reckoned with. We, as art teachers, hold many of the keys to how to unlock what it is that we are seeing, how to talk about the visual information, and why it should have any meaning in our busy electronic lives. Integrated curriculum should be an obvious choice for all schools, but try to standardize integrated curriculum... Integrated curriculum seems to serve every learning style and would open doors to individual meaning and group understanding previously unheard of. Cognitive imagination is something that is strived for in the art classroom. We would love individuals to create original, idea-based work. This is a grand idea, if each student who comes to class is prepared to bring something to the floor. Efland has defined three of the many places we may be going in art education, I for one, tend to side with Visual Culture understanding. It seems achievable and "of the moment." One of our new
“buzzwords.” —A
(Message ID No. W1-75DA)

Another person I responded and picked the point about “buzzwords” for further elaboration. She wrote:

Hey, A,
I just finished reading your response and I really liked what you had to say. I wanted though to comment on your buzzword. I like your terminology and you also stirred up my thinking process. I was taking a walk yesterday with my cousin who is a retired history teacher from Columbus Public. We were having a conversation regarding education practices of the early 1900's. You know the sit and be quiet and do as you are told and memorize, memorize, memorize! Then we talked about education today and all the testing that students have. Oh my, are we returning to the education practices of the early 1900's. He felt that this could be happening. We continue to try and improve education but are we just coming in a full circle. I hope that as educators we are always looking to find the best way. He also made a statement regarding teachers who he thought were the most meaningful for the students. He thought that the teacher that added a creative edge to their lessons and mesmerized those with the creativity were tops in his book. So when you said buzzword it made me think about what will be the next phase in the changing world of education and art education. I liked the article by Dr. Efland, I just hope that these changes will evolve. Write me back. —I
(Message ID No. W1-76DI)

Then, M came in to express her viewpoint and wrote:

Hey, A and I,
I agree with you about the new buzzwords! Way, way back when I was an undergraduate in Elementary Ed. we received extra points for “connecting subjects”. What I find now is that integration of subjects has become more refined. We now look for a key concept to guide us rather than related activities for a unit in Reading or Social Studies. It also seems that the children are more involved in the planning and reflection. So, the practice is the same but, thank goodness, research is not in vain and some improvement and progress is being made in its treatment. I also think that while one seems to favor one practice over another, that we actually use (or should use) all three. One is dependent on another. We should also not forget the four visions that Efland stated are now falling short. —M
(Message ID No. W1-98DM)
I came back to reply to M and said:

Dear M,
I loved your response and most of all I loved hearing from you. I hope all is going well. A short and brief scenario to your response. You and A have older students than myself. I think the integration is phenomenal but try to have an elementary team discuss big ideas and essential questions. All they want to do is have their students babysat and to take home a project that is pleasing to the parents. I think the first reform needs to be classroom teachers who do not respect the arts. Hey, maybe this would be a great project for me to work on. Stay in touch! —I
(Message ID No. W1-110DI)

D appeared now in the dialogue, and said:

Hi, I,
We, as art teachers, are on the cutting edge of developing the avenues back to "real education" and away from standardized education. I was also shocked at my own thinking, too, but look at where the legislature is taking us? Public education is being challenged by voucher elitism in the name of religion; religious isolationism, not diversity. Art teachers are very important people because they can keep alive inquiry, love of discovery, visual culture and literacy! —D
(Message ID No. W1-116DD)

A fifth student L now joined and wrote:

I am particularly drawn to the exploration of Visual Culture. We as Art educators cannot afford to ignore the power of popular images, video, and advertising in order to maintain the illusion of intellectual superiority in the fine arts. We need to teach our students that they themselves are, in many ways, part of the post modern movement. During the course of this program, I hope to develop some sort of plan to help introduce and assess Visual Culture as part of our curriculum. It seems likely that integrated curriculum may play a key role here. —L
(Message ID No. W1-105DL)

And the sixth student O dropped in this quick comment:

Art teachers should not assume that teaching art to the students set before them is enough. They should become a meaningful part of the larger educational environment, participate fully and become an essential part of the school without giving up the core mission of teaching art. —O
(Message ID No. W1-229DO)
In conclusion, we saw in these dialogues how one person’s reflection could be expanded by group members to become an examination of various professional issues. One issue could easily expand to various sub-issues and generate alternative viewpoints. In addition, it was interesting to find that the group rarely settled for a clear-cut single-minded position. It was common to find that those initial postings on questions ended up with many different variables considered. And then an apparently simple question acquired several dimensions to be examined. Multiple viewpoints were brought to the table and it became hard to accept one version of reality. The collective reflective and negotiating process went back and forth as students clarified and revised what they said. Because of the time flexibility of virtual discourse, they were able to re-consider comments and add new understandings. Recall the message coded ID No. W1-98D above, which said “…so, the practice is the same but, thank goodness, research is not in vain and some improvement and progress is being made in its treatment.” This reflection changed the direction of the group discussion from asking whether we were moving backwards in educational practice to considering whether present educational trends were being implemented with new understanding. And then the dialogue headed toward discussing the context and reality that art education faced today. Engaging in reflective dialogue with a support network like this could help students become better thinkers. In a face-to-face discussion, it would be relatively hard to facilitate such a long thinking process.
4.3.2.7 Example 7: Showing professional support

In various occasions, dialogues in the online classroom showed how teachers reinforced each other’s spirit through moral support. They encouraged each other to hold on to some central beliefs of their profession. From such moral support on professional values, we see how a group of art teacher sharing with each other their reasons and origins of professional beliefs.

Here is an example. Student I was feeling sad and discouraged by her “imposed-upon” role and function as an art teacher in her school. She expressed her feelings in the online classroom. This personal reflection triggered many eager responses by others. They not only came to give comfort but also they argued why she should not be obstructed in her professional self-worth by others who did not value art learning. As the dialogue developed, it became more serious than just sharing personal feelings. It was a group of professionals trying to form some consensus on professional values and identities. There were some common grounds, but each one arrived at these common grounds from different reasons and background contexts. It was a collective effort in reconstructing their professional belief and sense of self-worth. Here is the initial thread:

Hi,
I am going to cut to the chase and would love to know how you present your lessons as a young, white, woman teacher in a school that is predominately black. I have the opposite I am a mature, white, Jewish teacher whom teaches to a predominately Christian, white group of students. I am elated when I have students from India, Syria, Taiwan and so forth become my students. It feels so much more global and real life. Sometimes I feel as if I teach in a private school. I do though love the community in which I teach and the parents are so kind and warm. It is just as though the rest of the world has not come to us. I am trying to bring the world to them but it seems sometimes like a lonely endeavor. Remember I am the art teacher and I am on the bottom of the scale. Love, —I
(Message ID No. S2-320DI)
The first respondent jumped on the ship to give words of comfort and encouragement:

I,

You are only on the bottom if you let yourself be placed there. You have given me an excuse to rant again. The humanities do not have to take second place behind "academic" subjects! Part of our jobs requires us to make our area a vital part of the school. At SJA my colleagues view the art dept. as a resource, like the library. If they need materials (poster board, markers, scissors, etc.) it is there for them. If they want lesson ideas, we have done cross curriculum lessons with chemistry, math, Latin and others. The administration comes to us for easels and special occasion cards and other presentation needs. The art club decorates and creates items in the name of the school for charities and other social causes. Every kid in the school, art student or not, can come to the art room for some poster board or glue or help with her English presentation or a "fun" place to work. In short, we have made ourselves important to the school and have reaped the benefits and appreciation. It wasn't always this way. We had to work at it. Our budget slowly grew as we did more and more. Our rooms were remodeled three years ago, we will be getting an exclusive Mac lab (our school is PC but Macs handle graphics more easily) and the principal didn't bat an eye when I requested we replace our two kilns in the next three years. The art department is a vital part of the school and the school would be poorer without it. —Q

(Message ID No. S2-321DQ)

With the words of comfort and reassurance of the value of art in school, I felt encouraged and wrote back:

Q, you can rant all you want. Do you want me to tell all the wonderful things our art department has accomplished, I will make you a list but I disagree with you about where we are in the ranking. Remember, I teach elementary art and our students are not graded. Grading of a subject puts things in a very different perspective. My son is a senior in high school and in an AP art class and his teacher and the department are well respected. Also, I do a lot of integrating across the curriculum with children literature and last year with my students for the bicentennial my art students researched numerous famous Ohioans and painted portraits that filled the halls. I even put all of them up for display in the 4th grade hallway so the fourth grade teachers would not have to decorate that area. I never heard a word, positive or negative. Believe me I am not looking for praise and I am not embittered or on a tirade, I am just stating the facts. I am a traveling, elementary, art teacher for three schools, in four days. I am telling you that I am low woman on the totem pole. For five years I have trveled numerous schools and worked with a lot of wonderful teachers but a lot of shallow, self consumed, non appreciative of the arts and so on and so forth. I am awaiting your
response to mine. I love the discussion. Keep on! —I
(Message ID No. S2-322DI)

Q wrote back again:

I,
Knowing you I'm sure you have done wonderful things and that is why I wonder about the position you claim. Admittedly I haven't taught elementary for years, and I do seem to recall that elementary teachers tended to be a bit more clique-ish than secondary schools. (I always went out of my way to be friends with the secretary, janitor and principal, in that order.) But WHY do you think you are at the bottom? Is the music teacher there with you? Are other "traveling" teachers treated the same? Is there overt discrimination? Maybe it is a guy thing, I may be too competitive for my own good. (We don't have tenure at SJA and I figure one day I'll push too hard and be out on my ear.) I just hate to hear any art teacher say they are at the bottom of the heap. We teach a subject that has infinite possibilities. We encourage creativity and cognition as opposed to memorization. Grades can't be everything. (Neither can state proficiencies!) Kids in the future have to be able to think outside the box or we will turn into another Japan. (Opps! Stereotypical Asian bashing, but that culture does reward conformity.) I'm convinced I teach the best subject in the curriculum and I'm obviously not shy about sharing my beliefs. —Q
(Message ID No. S2-323DQ)

Now S came to the table and wrote:

I & Q,
I was enjoying both of your points of discussion and I can see the passion there, thank the gods! What Q is saying, I think, is that as art teachers we are stereotyped and marginalized because we are perceived as unimportant and less than "academic" (in the mainstream sense) as our collective identity among other teachers. My daughter is taking the undergrad version of what we are talking about at OSU in Women' Studies and so I'm getting a double whammy of multiculturalism helping her write her papers. What I find interesting is that we all belong to groups. Many of us belong to marginalized groups, or perceive ourselves as being in these groups, which depending on our attitude is either a positive or a negative. For me, it doesn't really matter, because all groups are subject to change, and if you play your cards right, (as my father would say) you can make it work for you, no matter what the perception. Existing paradigms are always shifting. The question is will they shift in favor of supporting or against it and that depends on your passion and commitment to “your group”.
As art teachers, we are always being treated as lesser than core teachers and challenged with the fear of dismissal, either individually or collectively. However, like the medicine-man, within the greater staff of teachers, we have the capacity to use our occupation and subject matter, Art, as a vehicle to teach the things we
feel is necessary for our population that other teachers may not be able to teach or choose not to teach. This gives us a lot of freedom. By some, this freedom is viewed as a threat to the status quo of mainstream teaching practices, mainly because it is misunderstood or does not conform. These are our limitations, and may appear as drawbacks, but from another perspective are really our strengths. For instance, making art is all about maximizing limitations by finding creative solutions. What Q is saying is to find the means to maximize your limitations, you first have to perceive the problem as an opportunity to sell your perspective and do so within the limitations of the existing paradigm without compromising yourself, your occupation or your group’s collective identity. My method of doing that is this: We all put our pants and panty hose on the same way, so just find that person(s) hot button, push it, and apply Art! In this way, we can produce the positive from the negative and make it mainstream. This is what all groups (cultures) do that are marginalized and go from surviving to winning. That's my take...for what it's worth. —S
(Message ID No. S2-325DS)

A fourth student D jumped in to add her feelings, and argued from a different perspective why I should not feel sad:

I,
Art is not required in California elementary schools, so every time I'm asked to teach a contract I know that the classroom teachers and the Principal had a staff meeting (maybe with the PTA rep.) and most definitely decided that they wanted art in their school. When I (and my colleagues) accept a contract, I (we) feel wanted and needed, and certainly appreciated. In a weird way, I, I guess I'm saying if your job WERE eliminated by some stupid administrative cost-cutting measure, you might better understand how much you are appreciated. —D
(Message ID No. S2-327DD)

Then, I responded:

D,
I am not looking for appreciation, I am well past that in my life. My students are what keep me going. When they enter my classroom I forget all the administrative business. —I
(Message ID No. S2-332DI)

A fifth student P came on board and added:

I,
Teaching overseas has demonstrated to me how much art is desired in the schools. Because the purpose of expatriate schools is to attract paying customers and
satisfy the wants and needs of an expatriate community, all overseas schools that I am aware of offer fairly extensive art and music programs. The community and staff may always show their appreciation but if we were gone like S said we would be sorely missed. Over the years, I've had many teachers say "I couldn't do what you do." Needless to say, I couldn't teach in a regular classroom either. When I get the feeling that others don't find what we do to be valuable, I remind myself that they may have other agendas and insecurities. Kids like art which makes some subject area teachers a bit jealous. I just remind them that we made our own choices. Mine just happened to be the right one. ——P
(Message ID No. S2-329DP)

A few days later, the first student I responded:

Q,
I was just frustrated last week and had to clear my thoughts. It’s just so happened that you responded and we took off in another direction. I still believe that no matter how valuable I feel the arts are, we have a long way to go to help others realize their value in education. I do not need to be sold myself, that is not the problem. I, like you worked in the corporate world for many years and I made the decision to change careers to do something I loved and believed in. I am just disappointed with the shallow minded people that I have to deal with. I realize that they have their own agendas but this week’s article on socioeconomic divisions, etc. spurred me on. ——I
(Message ID No. S2-333DI)

However, this discussion about one’s perception of his/her professional worth continued as more people joined the discussion. This was the second week of it and students’ words of sympathy and comfort accompanied with sharing of personal experiences continued to flow in the threaded discussion board. R wrote long lines to share her experience:

Hey, I,
I love all this discourse that you started. I wanted to say to you that it was quite the shock when I began (as a student from Catholic upbringing and schools from grades K-College) teaching in a dominantly black school. And the size of these kids. Gosh! I had done all previous work in an elementary school. To say the least, I was petrified—most of my first year.
My experience in High School (at Mifflin High) was negative to say the least. I had naïve views that High School kids took art because they liked it. Ha. My students wanted an easy A and the really talented ones never let their true talent come out, because it was "uncool" or they did not want to stand out. I was battling
for their attention past themselves and science class. I am not sure I will ever move to teach high school.

And making a difference? I identify with you I, because my job entails "beautifying everything here at school." Teachers think nothing of pulling students out of my class to help them do whatever, or to tutor them, or to take them to a doctor's appointment, etc.

I remind myself when I feel down about it, that my students love this class. They look forward to it, and at moments, I see them shine and it makes me so proud. I have an incredibly supportive administration that encourages me daily to try new things and to incorporate this and that. Am I a glorified babysitter? For some, I guess art will always be a filler. But those teachers I feel sorry for, because they are the ones who most likely had a horrid art teacher themselves who never taught them the true meaning of art and art education. I know I make a difference and taking these classes is like a sweet reminder that there are others out there like me. Go all of us!!! ——R

(Message ID No. S2-339DR)

I, who started this long process of reflecting on art education’s value in school, responded:

I'm starting to feel a little guilty that my posting this week caused so much commotion… You are a bunch of wonderful art teachers and friends. I appreciate the sympathy. ——I

(Message ID No. S2-345D)

A seventh student A now joined to add some practical suggestions to promote public awareness to art teaching and learning. Her reflections turned the whole debate on how valuable art was in school education to considering how some actions could be taken.

She said:

Hi, I,

You feel guilty over this—DON'T. It has been interesting to follow all the traffic on your issue. I see where you're at. I started teaching in Cleveland the same way. I shared a lot of the frustrations. When I was blessed to be at the school I'm at, I was pulled aside by the P.E. teacher and my very tired self was given a realization that you have to fight for what you get. Art, music, P.E. and library then pulled together and became a larger force. Because we had part time folks (music and library at the time), we worked together and supported each other, all of us had influence. It worked so well that the special teachers do the schedule (for the benefit of children- not teachers) and we have an incentive program that is unique, and provides a lot of leverage. It can be very frustrating to cruise different schools, not know the kids well 'cause there's so many kids, and not be in the school
enough physically to be seen as a fixture. Q is at one school only and that makes ALL the difference in the world. See what you can do in your own school to magnify what is seen of your impact. I know your kids work is up, maybe promote yourself by getting a couple small grants (lots of admin P.R. value), or contests. Local parent newsletters make good press and are pretty easy to get kids work in. PTA usually has power with it, it might be something to look at. If you really think its draining you, can you apply for another school? You're in a tough boat but hopefully the cracks are something that can be fixed. Hey and about that PMSing stuff- used correctly a good case of PMS can blow doors off their hinges (either that or Midols cheap). Hang in there. Love ya. ——A
(Message ID No. S2-347DA)

Finally, I wrote a sort of closing comment to this collective reflection:

A,
That last statement gave me quite a set of giggles. Really I am doing just fine for the most part. When I opened up this can of worms I was initially relating the similarities in the article for this week and the class structure in school systems. Again I love the kids, my subject, the parents have been the best but what I see lacking is teacher support and respect for the special subjects as they call us. Q and R like to call it jealousy but I think there is a class distinction among teachers and subject matter. I truly believe that what you say is true, go write a grant etc. and I will gain the respect for what I teach. You were very supportive and from the bottom of my heart I thank you and I am going to school now with an enlightened attitude to continue to do what I love and to hold my head up high because I know what I teach is important. Love, ——I
(Message ID No. S2-348DI)

The tone in the last quote here was much more cheered and assured than the sad tone at the beginning. It seemed that the group’s reflective process served not only to re-examine one’s professional philosophy, but also to open up and remind people of some alternative viewpoints when they feeling down. The reflective process worked to support members when they were challenged or discouraged. And these words of comfort reflected in deeper level on their own professional values and beliefs.
4.3.3 Reflection on research inquiry

This section discusses students’ reflections on conducting action research on their own practices. In the two research writing courses, students were paired with another as research partners. They discussed with each other throughout the courses and gave advice and suggestions. In addition, each posted to the discussion board their research proposal as they developed it in its early, middle, and final stages. Everyone was aware of whose research was similar to theirs. Those who had similar topics of interest for research developed more conversations among themselves.

Teacher research has been advocated for its critical role in improving practice (Loughran, Mitchell, & Mitchell, 2002). Teachers’ research efforts serve many different purposes that could lead to better practice. For example, they could gain more personal understanding and objectivity in evaluating educational processes and student outcomes. Other advocates of teacher research such as Evans (2002) and Hoyle (1975) also argued that this professional process of knowledge-building was the underlying factor of a successful practice. They think it is central to educational practice and can play an important role in teacher’s professional lives. Evans (2002) defined professionalism as:

…an ideologically, attitudinally, intellectually and epistemologically based stance on the part of an individual, in relation to the practice of the profession to which s/he belongs, and which influences her/his professional practice. Hoyle formulated two models of teacher professionalism: ‘restricted and extended’ (Hoyle, 1975, p. 138). The characteristics used to illustrate these two hypothetical models created what may effectively be seen as a continuum with, at one end, a model of the ‘restricted’ professional who is essentially reliant upon experience and intuition and is guided by narrow, classroom-based perspectives of teaching. The characteristics of the model of ‘extended’ professionalism, at the other end of the continuum, reflect a much wider vision of what education involves, valuing of the theory underpinning pedagogy, and the adoption of a generally intellectual and rationally based approach to the job… (6-7)
Thus, undertaking action research on one’s own classroom practice can be seen as instrumental in building teacher professionalism. Action research could be the bridge to connect theory and practice to \textit{extend} professionality.

But it takes effort to master research thinking, judgment, and skills. Evans points out the training that teachers need to conduct meaningful investigation. Specifically, they need to be helped to achieve good conceptual clarity and analytical interpretation. To do so, she argues for more teacher reflection. After that, more rigorous research result and practice can follow. How does one learn to become a reflective teacher researcher? Loughran (2002) argues it can be done through engaging in a teacher network and supportive research cohort. He argued says:

\begin{quote}
Being a teacher-researcher illustrates professionalism in terms of a willingness to accept that one’s own experience is the major source of improvement in practice. However, this is not to suggest that it should be viewed as an individual and isolated activity, for the process of teacher research is enhanced if it is a collaborative venture. When teachers meet to share their knowledge and understanding about teaching and learning, they share their concerns and respond readily to each other’s ideas. They develop tentative theories… (16)
\end{quote}

This peer-review kind of collaborative research inquiry could further teacher thinking about formulating and conducting research. In the online classroom discussion postings, many examples supported this argument. The followings are three kinds of examples of their engagement of collective research inquiry.

\begin{enumerate}
\item[4.3.3.1] \textbf{Example 1: Analyzing one’s own research thinking}

In the online classroom, students reflected on research with many details. The online sharing made it easy to access everyone else’s inquiry process and report one’s
own as well. In order to present their research thinking to the community, students needed to be specific in articulation. In the following quote, K wrote to the online community about her uncertainties as to what constituted good judgment on qualitative studies. She questioned its subjectivity of an author’s research interpretation of class readings. This example indicates an effort to analyze the research process. In the end, she noted that she became more critical of research methodology through her partners’ feedback. She said:

I should have absolutely included the research methodology and the critical thinking skills. I know at the time I was perplexed about how this qualitative research was going to be justified. I did agree with some of the other students that the author seemed to justify her own conclusions from the research without concrete evidence. Sometimes it seemed that it was her own gut feelings and that there was not substantial proof that the students were thinking anymore critically. On the other hand, this kind of research methodology is difficult to support, similar to the difficulty in grading art. Thank you for your comments. I appreciate both the positive and negative criticism. This continues to challenge my thinking skills and forces me to look more critically at my responses before I post them.

—K
(Message ID No. P2-236DK)

The second example below indicates that students were aware of others’ processes. L referred to other members’ research designs and compared the similarities and differences. Although assessment was a common topic, he analyzed how different researchers have different considerations as to what data meant to them. Socioeconomic variables came in to play a role, as he argued. This revealed that group sharing might help one to better conceptualize research, because it called for constant comparing and contrasting. He said:

I have mulled over this question for a greater part of this week and I finally came to the realization that age plays a strong variable in the assessment process. I
would not assess my young students or look at their art making in the same way that D or J would. It would be more likely that I would assess it along the same lines as S except that S and I both know that our socioeconomic factors cause another variable. Though it should not cause us to look differently, it does due to the influence of external variables. Many of my students attend Saturday morning classes at the Art Museum or take private art lessons. They have had exposure to various gallery and museum experiences. They have an abundance of art materials to work with at home and parents who are there with them to assist them for whatever they need. My young students have a developmental advantage due to socioeconomic influences.

I chose to disagree with the assumption that assessment in art should mostly be the assessment of student artwork because of this age factor, socioeconomic and developmental influences I prefer to assess their understanding of the concepts, techniques, love of learning and effort through other means than the finished product. —L

(Message ID No. P2-447DL)

4.3.3.2 Example 2: Encouraging each other’s research process

In many cases, students showed their intellectual and emotional support for their research partner’s process through professional approval of its merit and judgment. My reading of student postings in research courses found that approval and encouragement from their research partner was as important as those of the instructors. They viewed reading others’ research as important learning in the online classroom. This might be attributed to the fact that they had come to realize the professionality of the members in this group. In the following example by Q, one can sense that he was confident about his partner’s research quality and its future results. Appreciation of peer support in the research courses was common. Q wrote to his partner:

A,
Well Dale, You are on to some important stuff with your pursuit of the metaphor. It is a way that many of us make sense of things and a valid way help students and adults understand. As a means to express an interpretation, I think the metaphor has no equal as long as we don’t trivialize it. Since I hold no credibility as a poet
or philosopher, I can only encourage from my vantage point of literary bumpkin to continue in this pursuit. I'm counting on you to help me sort out my sorry little life, metaphorically speaking.

As a partner I feel that I have given far less than I received. But in my defense, I have got to say that you have been a high maintenance partner. I've worn out two pairs of reading glasses since this class began. It's time to think about adjusting your medication and slow down so the rest of the world can catch up. I look forward to seeing you soon. Love. —Q

(Message ID No. P2-710DQ)

4.3.3.3 Example 3: Sharing one’s research with an enthusiastic audience

One could argue that it motivated students to invest more effort in research when an enthusiastic audience was there waiting to see the findings. In the discussion postings where students commented on their partner’s process, enthusiasm was shown often. Many of them asked to be notified on research results when completed. Others’ research questions interested them because of common problems they experienced in their classroom. Some applauded intelligent research designs by other members and looked forward to seeing how their students would respond in classroom. At the end of this program in the summer of 2004, the group requested to have all members’ final research projects compiled on a compact disk for distribution. They saw the collection of this class’s research projects as valuable resources for future reference.

Below is an example by K that illustrates members’ enthusiasm toward each other’s project. She went into detail to describe her thoughts about her partner’s research and possible further development. As she imagined the possibilities, she sounded as emotionally immersed in the study as her partner. When she conceptualized these possibilities, she also referred to her own classroom situation. This also illustrated the
benefit of sharing research to professional group—teacher’s research inquiry became a collective reflective activity. She wrote:

R,

As I said before, I think that you were brilliant in capturing the students’ attention at the end of the year with this study. I loved the pictures, but am still wondering when you will post the picture of you in your Egyptian dress.

You have a great foundation for future study. The students seem to have a solid background of the Egyptian culture judging by the pictures and responses. You mentioned the six topics important to understanding a culture. Would it be possible to focus on one next year as a “big idea”? I’m new to that way of teaching myself, but noticed “power” in your list. This is what I hope to pursue with my kids after the “identity” issue this year and thought that some of the other five topics looked equally interesting. Perhaps then when you compared other cultures the kids could create an ongoing chart of similarities/differences and the reflection of the traditions in their own culture and/or art pertaining to that idea.

The boys and girls might start to think about and document the strands that are common through cultures and time. You could even create preprinted journal pages with graphic organizers (thanks, C!) and maybe this would make it easier to track responses. I was trying to think of a way to do that myself with relation to my topic since we create student journals during the first weeks of school. As far as other cultures, the Mayan culture would be a cool one to compare and contrast—they have step pyramids, wall paintings and relieves, mummies, glyphs, etc. And please don’t forget the ancient Celts! They are often overlooked yet created very interesting stone monuments and wall carvings. (Sorry, had to get that in.)

Or perhaps, you would want to stick to one type of art such as wall murals and study that over a series of cultures and into our present day use. You mentioned monuments in the early stages of your research also. This could be another option. Now I am getting way too interested in your idea again! I am sorry, but I find this so fascinating and am thrilled you are doing this project.

One more thing— I was so happy to see your hanging grade level outcomes in the background of your photos. I too display our grade standards in a similar way. I don’t have much wall space and they have to be visible to the kids during your teaching so I am racking my brain for a more efficient way to do it. Right now mine hang from the pipes. I thought of a flip chart but the writing would be too small … Anyway, it was fun to see the similarities in our room.

See you soon and congratulations on your final report! —K

(Message ID No. P2-702DK)
4.3.4 Reflection on art education as a profession

In this section, I present reflections that show how the students perceived their professional function and the future of their profession. The purpose is to show a group of today’s art teachers’ concerns and philosophical orientations. Although it was not in the initial goals of this program, this was significant among other program outcomes. These reflections enable us to gain insight to some community cultures that are maybe representative of art teachers today. Although this was a group with diversity in age, cultural and educational background, and philosophical orientations, they represented some distinctive philosophies of art education that exist today. The following four quotes are examples where people reasoned their professional positions and orientations with supporting arguments.

In the first example N reflected on cultural phenomena, and ended by relating this to what she thought art teachers should do with a strong voice. She wrote:

I began seeing race (color) as a stupid method to define humans, but what I feel here is that the issue is not race, but culture. Culture defines a person's identity and in some instances particular human cultural identities have been really messed with. Nothing was clearer to me than those expressed on the video "Ethnic Notions", which gave me a whole history of understanding to teach about image making. I sincerely believe that this incorrect kind of profiling is still taking place today with the manipulation of media and although it may be more subtle, it is still important to be sensitive to it… Inclusion is the gift of diversity; exclusion is the evil and isolation of any group based on ethnicity moves a society from arrogant to evil. Art teachers need to be vigilant that that doesn't happen and we can do it through our sensitivity and communicable skills as art educators. I think it's more than just a reactionary conclusion; it's a real responsibility. —N (Message ID No. S2-140DN)
Below is a second example, where S argued that art teachers should initiate change and improve diversity and democracy. She said:

Hey, M,
I think that that's a marvelous suggestion. Multiculturalism in Art has to be about introducing something into the curriculum that puts a different twist on what is the current state of mind otherwise we don't live in a democracy. I think if we're caught up in the fear of speaking out or teaching from a different perspective than we risk something greater than our job, our forum to express ourselves freely. Is the cup have empty or is it half full? David Kruger's book which I read, "Choose Hope" also gives a perspective on war from understanding how solutions might be extended to curtail wars before they occur. It's hard to change a mind following the mainstream. Vet's Day could be a great opportunity to talk about these issues and I like the suggestion of the DADA movement. Even having to works of art showing the "glory" of war and the devastation of war lends itself to thinking and developing a greater forum for discussion. —S
(Message ID No. S2-808DS)

In the third example, D reflected on what education should be about and what current reality in education is with a pessimistic tone:

Hi, P,
You make a great point of what education SHOULD be. Somewhere along the line we have allowed it to degenerate into a system controlled by state bureaucrats that mandate teaching to a test in the name of minimum standards. Our democracy seems intent on dragging education down to the lowest common denominator. The raise in home schooling indicates that our current system is not doing the job, however I don't see any real grassroots effort to make any major changes. —D
(Message ID No. S2-805DD)

In the last example, J expressed her admiration for a fellow classmate’s remark on teachers’ being role models for moral education and said:

Q,
Wow, very well said. You made several points I would like to respond to. Many have said that they do not agree with religion in schools. I agree. Spirituality, on the other hand is another case. You really hit a homerun when you said, "how I conduct myself with colleagues, students" you stressed other qualities such as caring, respect, and non violence... It's all in how we conduct ourselves. Is it important to me that the kids know I'm a Christian? No. Is it important for them to know that I've never solved a problem with physical aggression? YES!! Is it important to me that they see me as a caring person? ALWAYS. Everyday, like it
or not we lead by example. I agree with the "feeling" you and your principal are getting from kids today. The only "moral upbringing" many of them are getting is what they see from us. It's a heavy burden on our shoulders. They are lucky to have someone like you and your principal. Thanks again for your insight.
—J
(Message ID No. S2-851DJ)

From the above quotes, we see how the students openly shared their professional values in the online classroom. One reflection can easily draw a series of responses from the other sides of the computer screen. It is hard not to speculate that somehow this sharing of professional values and identity enhanced and re-assured one’s own professional identity. However, this is beyond the scope of the current study.

4.3.5 General reflection

In this section, a kind of general reflection is discussed. This kind of reflection indicated how personal educational theories were developed as a result of online learning. This could be argued as an ideal educational outcome of professional development program. Reflections of this kind showed people’s blending of four different dimensions—personal context, professional values and choices, professional knowledge, and practical theories—altogether. The interrelationships among these dimensions were woven together. And it often occurred within one piece of writing. It evidenced their application of their learning and their deliberate inquiry in constructing practical educational theories. Cornett, McCutcheon, & Ross (1992) emphasized the importance of this dimension in teacher thinking and practice. They said:

Much curriculum research has turned away from positivistic notions of theory making (nomothetic, decontextualized, universal) and become more concerned with ways in which teachers develop practical theories to address problems they encounter in classrooms and schools… Practical theories of teaching are the
conceptual structures and visions that provide teachers with reasons for acting as they do, and for choosing the teaching activities and curriculum materials they choose in order to be effective. They are principles or propositions that undergird and guide teachers’ appreciations, decisions, and actions. (14-15)

The following three quotes illustrate the development of personal theories.

In the first quote, S reflected how powerful the artmaking project in the studio method course was in changing her views as an art teacher, an art student, and an artist. She called this new view a “third reality.” This third reality could be seen as the product of her personal theorizing. She reflected how it would affect her future practice and her students’ learning. She said:

I came across a good quote by the artist Enrique Chagoya which goes something like this...." When two things get mixed, a third reality appears. This is a part of my history." I feel as if this project gave me the opportunity to acknowledge and solidify my response to the "third reality" of being a person who is experiencing life as an expat in a world whose culture is very different from my own. Perhaps this is too personal a response. This project didn't feel like a "project." I have been involved deeply through the whole process. The Third Reality is that I have finally found my own "Artist's Voice." The process from stating concepts to be explored to building a general and artistic knowledge base to working in a series is the artistic process— one relies on the other. Painting, sketching, shooting photographs, carving— these are just ways to translate physically what is truly crucial— the thought, the idea. This process has expanded my idea of what art is about and how it gets its energy.

Art should be organic, moving and expanding into larger, deeper issues. The use of essential questions and of knowledge base building provides the "fertilizer" to keep the ideas growing and maturing into stronger, more universal concepts. Writing down and staying faithful to the Big Idea and supporting concepts helps to focus thoughts and creative energy that can grow into confusing "kudzu."

Having a firm knowledge base (both general and artistic) lends integrity to the work. I have grown more confident of myself as an artist as a result. I am still aware that I have a long way to go in terms of technique, but now I feel like I have something important to say in my work. Having other people to bounce ideas off of, seeing different people's approaches to this project has been enlightening as well. So often, we see the end results which are mere snapshots, instead of enjoying and empathizing over the successes and stumbling blocks.
As a teacher, I have definitely become a believer in the Big Idea. I am still struggling with how this particular idea will translate into a unit for my young students but over the course, I have thought of many appropriate ways to teach my lessons in order to make the artwork more meaningful. I still think that kids are sold on technique, because skill represents success and success leads to confidence. When they are taught how to define and organize an artistic idea married with technique, in other words to find their own voice –that's when true confidence and artistic integrity will appear. —S

(Message ID No. W2-PRO-S)

The next quote here shows how Q negotiated three different dimensions and arrived at conclusions about his choice —to be extra cautious on introducing controversial art into his middle school classroom. He first theorized what he thought Mapplethorpe’s sexually explicit photographs were about through an art world perspective. Although he did not like the artworks personally, he could see how the artist’s purpose could be viewed as valid in a broader social and political context. Then he brought up his own personal feelings about the artworks. Finally, he made choices to not deal with these controversial works in his classroom, due to the protectiveness he felt for his students. We see how an art teacher reached out to be as objective as he could be in viewing shocking contemporary artworks, but through professional judgment he then made curriculum choices for his students. This was a process of formulating personal practical theory. He said:

These are my thoughts on the Mapplethorpe article. First my personal views are filled with all of the baggage that comes with being a white middle class male, father, husband and enlightened homophobic. I recognize the evil and emotional pain that exists in this and all societies. I recognize and accept the alternative life styles of consenting adults and I believe and support the exhibition of human expression regardless of its depravity. I've seen attempts to justify the validity of Mapplethorpe's work by pointing to the sheer beauty of form and balance. I see the use of the formal qualities of design as a manipulative tool, successful use I
might add, to bring his work into a public forum in order to shock. Some may claim that his work contributes to the decay of the moral fiber of our youth. From what I read, I doubt that there were many converts to the lifestyle from the group that viewed. As I see it, this is just another peek into a part of life that most of us hope to avoid. There is a very real part of society where people prey on others. When we do it in three piece suits and confine it to monetary and emotional damage, we seem to tolerate it. When it becomes physical and threatens our children we begin to cringe. I know that many in the homosexual community feel that Mapplethorpe helped a sexually intolerant public deal with an ever vigilant gay population. Unfortunately, I feel that it may have created an even greater misunderstanding about gay lifestyle to the point that straight Americans have a hard time accepting that homosexuality is not only about sex.

Now, to a more pragmatic approach to the Mapplethorpe issue. It would not come up as a possible topic of consideration now that I teach middle school. Even if I were teaching high school, it would not be something that I would even remotely consider. I am not willing to give up my career, and undermine the responsibility I have to provide for my family financially and emotionally in order to introduce pornographic work to students, no matter how valid it is as art. I feel quite confident that L and D are quite aware of the peril that a male teacher puts himself in when even the slightest hint of inappropriate sexual behavior is suggested concerning students and teacher, regardless of its validity. I suppose I should respect the female teacher for grabbing this bull by the horns, but there is something in the back of my mind that thinks it may have been a bit irresponsible. Had the opportunity not arisen for this class to view the work, would these students be less prepared to face the challenges the art world has to throw at them? Would not a college class where the legal and moral challenges are less stringent be more appropriate? With the ever changing push for gender equality, women are now being considered as potential sexual predators. I can see this scenario going very badly in spite of very good intentions and there could be many students who might never get the chance to gain the insight of an excellent teacher. I think this would be a good time for me to shut up before I step in some of what A stepped in at the beginning of this course. —Q

(Message ID No. S2-438DQ)

In the quote below, P first tried to theorize what art meant to others and to him. Then, he explained that his theories of art made him avoid teaching only skills and techniques in artmaking. Note that he defined what art was before he decided what art teaching and learning should be like. He related contemporary theory of art to his
professional values, his students' living contexts, and his teaching goals. In this piece, we can see how important personal theorizing about art is for an art teacher. He needed to make sense of theories in context before the theories became practically meaningful.

He said:

I feel that the word art is itself so diluted that it has little real meaning. We, as a western society have been brought up believing that art means worth. The art museums are full of priceless objects which must be art. After all, they are in an ART museum and they have value. So as we apply the term to everything from slip cast ceramic cats to art class in an attempt to equate art with value, we have rendered the word useless. But for the purpose of focus, I will use art as a word for meaning, not product. Do some products have an intrinsic art value by virtue of media? I don't think so. Do some products have art value by virtue of intent? Definitely, if that intent has meaning beyond decoration. As an art teacher I have always felt uncomfortable teaching elements, principles and media. Not because I feel inadequate, but because I was misrepresenting what I thought of art as being. We have painted ourselves into a curricular corner, (a) because people want products (b) because it's easier (c) because, that's the way we've always done it. There's more art going on in a good writing or literature class than there is in most art rooms.

I think that I can better convey my beliefs about art by stating what I think art is about rather than what I think art is. First and foremost, art is about man (in the mankind sense not the gender sense). Art is about our relationships, relationships with us, each other, our world, our parents, our past, and our cars, almost everything. Art can be personal, social, global, political, or emotional. It cannot be neutral. One of the great flaws (maybe it's a misinterpretation) in modernist theory is that art is only about design and formality and that one should distance one's self from personal involvement. I can't image standing in front of a Mark Rothko painting, contemplating the formal characteristics, oblivious to the raw emotional power being exuded. Maybe the critics were wrong.

Postmodernism throws a whole new monkey wrench into the mess. Is everything art? Are we now accepting those annoying hip hop videos as art? What about the goings on in those crazy LA and New York dance clubs? And, what about my kid's tattoos and body piercing? Is this art? I'm not sure yet, but I'm working on it. What do I teach my kids about art? I try to teach them that art is about meaning. All that other stuff we do in class is in support of finding meaning. More importantly, I am trying to help them discover meaning in art for themselves which is why art criticism and particularly postmodern art criticism is so valuable.
I can't say that I alone give a well rounded view of the art world but with my teaching partner we cover a lot of territory. Patti is comfortable with the nuts and bolts skills and the works of modern artists and some postmodernists like the pop artists. It gives me the latitude to explore postmodernism and multiculturalism. We do of course cross over in our interests and sometimes oversee critiques together, which is helpful at assessing our sessions. Most of the art that we do exclude is due to the political, religious and cultural situations. Given the restraints of unfree speech, I think we lean towards inclusion (easier to ask for forgiveness than permission). We mostly just want to do it better especially in the arena of criticism. —P
(Message ID No. B2-PRO-P)

Now if we look at all these three examples and consider their underlying significance for professional development, we see the importance of this kind of general reflections. We can look at it as the teacher’s personal theorizing, as Cornett, J. W., McCutcheon, G., & Ross, E. W. (1992) suggested. Or we can look at it as autobiographical inquiry, which was what Henderson (2001) promoted as important. He explained:

…We believe that through self-awareness you will awaken to who you are and what you believe in; and, in turn, your teaching will be steeped in discovery, inventiveness, and experimentation while grounded in deeply held beliefs and values. We will use the term autobiographical inquiry to describe this type of disciplined professional study… Through autobiographical inquiry, you challenge yourself to be in touch with the enchantment of teaching-learning transactions. (135)

Henderson reasoned that there are five dimensions in autobiographical inquiry. The first is “awakening to yourself” which means teacher need to be self-reflective to gain knowledge of self and one’s social philosophy. The second is “traveling with a trusted guide” which refers to a mentor such as a veteran teacher to support one’s professional inquiry. The third is “associating with self-aware others” which refers to professional
fellows’ moral and practical support. The fourth is “engaging in dialogue” which refers to discourse in a professional environment. The fifth was “becoming the individual you desire to be” which refers to the actions a teacher would take after exploring the four previous dimensions. These five dimensions of autobiographical inquiry were found in the online program outcome at different times and in different class contexts. I believe this was mostly the result of the productive learning community that the fifteen students had together developed. If a student had perceived that it was not worth the time to engage in an honest and critical reflective process with this community of learners, he/she would not have bothered to spend the time to generate such huge body of reflections.

Particularly with Henderson’s third dimension of “associating with self-aware others,” students’ reflections often included members’ learning outcomes. The following is an example. It illustrates how L counted other members’ learning process and outcomes as educationally meaningful as his own. In this writing, he moved from reflecting on his project outcomes to other students’ project outcomes, and then to his previous artmaking experience as an artist. Finally he turned to his professional growth again. He concluded that he looked forward to revising his art teaching. His final words were his reflections on how he could do better for his students. He specially said that being able to see all the others’ artmaking projects was fantastic, because it felt like a giant studio. This is an evidence of how individuals were able to learn through reading others’ reflective process, or their autobiographical inquiry, as Henderson described. He said:
One of the best things that I will take away from this course is the insight into my own work that I have gained. Creating art has always been a somewhat intuitive process. Now I look at my concepts and fit them into a much larger picture of what I am trying to create. I think we really came together as a group during this project. I wrote elsewhere that it was like sharing a giant studio with everyone. The interaction was fantastic.

I appreciate that the course has given me a vocabulary, and to a certain extent a framework, to think about creating art. The "Big Idea" and boundaries translate well into teaching art but also personal connections and building a knowledge base are important to impart to students as well. I, like some of my classmates, will need some time to assimilate all the ideas and incorporate them into our teaching styles. Trying to get high school students to build a knowledge base outside their own interests is not an easy challenge. It is often difficult to get students to "buy in" to an art project, to make a personal connection a part of the instructional unit will require some thought. Working on a series of pieces is something that I've only done in a limited fashion with my students. I look forward to doing more. —L

(Message ID No. W2-PRO-L)

4.4 Conclusion: Online classroom as social facilitation to encourage critical reflection

The postings discussed in this chapter can be viewed as reflective dialogues, occurring not only within the students’ minds but also publicly in the online classroom. As a result, this learning activity—writing what and how one learned—facilitated many opportunities for individuals’ deliberate reflection. Educationally, this is very significant. Publicly, such explicit reflections served two functions in terms of classroom interactions. First, they were a form of social engagement. Secondly, they were a catalyst to facilitate a community of inquirers. Brockbank and McGill (1998) stress the importance of engaging in reflective dialogue with others for better reflective thinking. They argue:

…It is through reflective dialogue that critical learning can be encouraged... We distinguish internal dialogue, within individuals, from dialogue between
individuals and with others. For, without dialogue, reflection is limited to the insights of the individual (which are not to be underestimated). Personal reflection demands detachment on the part of self, to look at another part of self, and in this there is a danger of self-deception (Habermas, 1974). On the other hand, dialogue that takes places with others reflects our view that learning is not merely an individualistic process. Jarvis (1987:15) stresses that: “learning always takes place within a social context and...the learner is also to some extent a social construct, so that learning should be regarded as a social phenomenon as well as individualistic one.” (58)

In the virtual classroom, learning was constructed through and in social engagement. The records of textual communications made this phenomenon more tangible than it is in face-to-face classrooms, where both verbal and physical communications occur. These mind-reading activities in turn promoted community development. The students wrote what they thought knowing that the content would be made public and trusting that others would understand them—their personal and professional self—through the texts. This was a social process where public dialogue—reinforced the qualities of individual reflective process. As an online student, individuals wanted to make constructive points through good writing and it encouraged them to be more deliberate and reflective. In a way, the postings on the threaded discussions could be seen as material for building community relationships. Individual and group reflections reinforced each other. Through those self-revealing reflections, community members came to develop more sympathy for each other. Hence, in an online classroom aiming for reflective thinking, students are more likely to engaging socially. And this social engagement makes possible active collaboration in constructing understanding.

Before online technologies appeared in distance education, researchers on reflective thinking already advocated that reflective thinking should be facilitated by
writing dialogue journals (Heichel & Miller, 1993; Lee & Zuercher, 1993; Reimer & Stephens, 1993). Today’s online technologies have provided more efficient and cost-effective tools for such facilitation. The body of reflections discussed in this chapter was made possible through online technologies that allowed a social space for people to reflect without restriction of time and space. Consequently, sharing and refining of personal practices were connected real-time to the online classroom. This constant reference to professional practice during reflections is less possible in a conventional professional development context.

These program outcomes made it clear that online distance education is a great way to facilitate professionals’ reflective learning. Especially in an extended program like this with a prolonged period of interaction and engagement, collaborative knowledge construction, personalizing practical theories, and the development of self-knowledge, could be brought together. The series of excerpts quoted below support such program outcome in students’ own words. These pieces were post-program student reflections taken in the final summer meeting of 2004. During the meeting, they were asked “Has your participation in this master’s program changed your thinking about teaching?” One student wrote:

It has changed how I teach and how I design curriculum. Previously, I would design curriculum around art, artists, standards, and some ideas about art making. Today, I begin with essential questions, learning goals, assessment, and works of art. All other aspects of the lessons are guided by these initial decisions. My curriculum is more cohesive, and because it is prepared for other teachers, it is more understandable to them. The way my curriculum is designed in turn influences how I teach. I think my teaching is ‘clearer’ today. My enthusiasm for art in the past would propel me to teach everything I knew about a particular painting or subject. Today, I am more thoughtful, and influenced more by the responses of my students. I think this is motivated by a deeper confidence in the value of well-design curriculum which
leaves room for multiple perspectives…

Another wrote:

…My participation in the master’s program has not changed my thinking about teaching, but it has put my teaching skills and style under a microscope, and aided me in reflecting more on my teaching strategies. I am able to look at my strengths and weaknesses and build a more solid art program….

Another wrote:

The entire program helped me create a more relevant and meaningful curriculum. Classes in multicultural art/visual culture, meaningful artmaking, art criticism and assessment created a circle of planning and teaching. Teacher reflection was stressed at every level. The courses ‘brought it together.’

Another wrote:

Providing the opportunity for working art teachers to obtain a master’s degree online was by far the most beneficial aspect of this program… As an art educator living and working in Alaska, where such programs do not exist, this was an educational opportunity that I am thrilled to have been a part of, and would never have had without this program. The quality of the instructional capabilities of the OSU Art Education Department was outstanding…

Another wrote:

I am much more critical of what I do in my classroom. When I don’t follow through with some of the ideas we gained in these classes I see in the results the difference. When projects aren’t working or I have poor student understanding I look at other ways to use one of the other ideas to attack the issue in another way. I don’t fall back into old patterns as much and I have restructured many old projects to be more effective…

Another wrote:

My practice is on my mind all the time, and this program has made me more reflective and critical of my delivery and planning…

Another wrote:

I have definitely become more reflective and critical of my own practice and ideas about teaching art. My limited background left a lot of room for improvement. The desire to improve was also there, so this program has helped that there is always something new to learn. I have learned that my excitement can be passed on to my students…
CHAPTER 5

ON USE OF WEB TECHNOLOGIES

This chapter focuses on program findings from the perspectives of the applications of web technologies and their educational impact on online education. The primary data from this chapter came from student participants’ and instructors’ survey results, my personal communications with them, and my program observations. In interpreting the underlying significance of the data and their internal interrelationships, I also used an online course designer’s point of view. The following questions were the main concern:

- What did the technologies provide to fulfill our program goals?
- What impacts were experienced?
- What were the educational consequences and their implications?

During the examination of these questions, both students’ and instructors’ perspectives were taken into account. Such comparisons were important because many challenging issues and tensions resulted from differences between the learner’s and the teacher’s expectations. At the end, a summary of practical recommendations is provided as suggestions for future programs.
5.1 Implementation of distance professional development via web technologies

Our program experience confirmed that web technologies are able to accomplish the department’s initial purpose of delivering professional development at a distance. The technologies made it possible to explore domains of professional development that are otherwise less explored in conventional face-to-face settings. Many benefits were found using this approach. The following are the major resulting features that were witnessed during the program implementation.

5.1.1 Developing a socially-connected professional community at distance

The electronically-connected classroom allowed a group of teacher practitioners to build a personalized professional community. Socially speaking, they were able to decide when and how to interact with the community at an individualized pace. This liberty and flexibility to make professional connections made it possible to build a support cohort around one’s other life agendas. Unlike face-to-face professional development settings, time and location barriers were almost irrelevant in this context. From this perspective, an online professional network enabled individual teachers to reach broader perspectives within their own daily life reach. And it consequently provoked grounds for contemplating deeper educational insights.

Moreover, thanks to the prolonged interaction and engagement with this community, these in-service teachers were able to develop a solid social network to further professional growth. This social ground in turn made it possible for them to learn from their professional peers through collaborative efforts. Involvement in academic
work in a progressive fashion together for two years made a big difference for this development. People remarked that they could raise questions and speak in a personal voice in this community with a sense of security, since there was a strong social foundation. This benefit is less possible in conventional professional development scenarios where engagement is usually short-lived or impersonal. Moreover, the prolonged intellectual involvement also reinforced the development of a social community. In learning from each other and developing professional respect for each other, members came to care for each others’ learning and were more responsive to others’ professional issues. In all, this interrelationship between social and intellectual aspects of a community enhanced greater potential in both dimensions.

5.1.2 Connecting in-service teachers from diverse contexts

Since web technologies have shed geographical barriers, one could easily build virtual connections with anyone around the world. Gaining understanding of cultural as well as professional diversity has become important in today’s education. The cultural dimensions underlying one’s practice could be further re-examined with teachers from diverse contexts. The in-service teachers enrolled in this program came from the Midwest and the west coast, and also from Saudi Arabia. Although they are all American citizens, one could see that these different geographic locations had underlying distinctions in terms of cultural backgrounds. Even within the Midwest, the teachers demonstrated diversity among themselves. There were differences in grade levels, and of educational background. Participants commented that they appreciated this diversity.
Because of it, multiple perspectives were often brought to the discussions and educational issues were conceptualized differently. Furthermore, this cultural diversity encouraged openness in discussing professional issues and problems.

5.1.3 Developing sustained interaction between theory and practice

The electronic connections via web technologies also allowed teachers to build connections between theory and practice. The theory was mainly content understanding pertaining to broader professional issues, and practice was related to their ongoing educational approaches that reflected local contexts and cultures. In the field of education, the gap between these two dimensions has long been recognized as a problem. One could attribute it partly to the fact that the context of theorizing is often isolated away from the context of practice. The separate contexts where theory and practice are developed and realized diminish their responsiveness to each other. For practitioners, being able to address one’s local, individual educational circumstances in such an immediate way was made possible via electronic connections.

5.1.4 Developing authentic reflective learning

Given a developed strong social and learning community as a foundation, the teachers could engage in the personal development of practical knowledge through situated theorization. They could participate in professional exchanges on important issues and speak back and forth to construct their own understanding. To discuss their situations with a group of professionals, they needed to articulate their own practices.
Most people commented that through the program participation, they became more aware of their instructional choices. They were able to build some central organizing approaches that integrated different dimensions of teaching, such as curriculum choices, assessment philosophy, and cultural factors. This ability to reflect on one’s daily practice and its broader educational consequences indicates that an electronically-connected professional network can foster authentic reflection.

5.2 Practical issues in presenting course structure via web technologies

Research has widely documented that online course design is a major player in shaping interactions and learning outcomes. Both visually and cognitively, the course design can influence learning. Visually, the course presentation guides students’ learning and cognitively, it provides structured grounds for students to explore content. It is a critical bridge to connect teacher, content, student, and the learning community. Online course presentation includes several dimensions, such as structure of content materials, their visual and cognitive organization, activities, assignments and projects, discussion arrangements. Each of these works like a cornerstone to construct a map of learning that students can follow at their own pace.

Without purposeful design in these dimensions, web tools will not work in an online classroom. They would not be able to facilitate learning (Stallings, Koellner-Clark, 2003). For example, Korthagen et al (2001) documented that online technologies alone did not create a virtual learning community. In addition, since education is delivered in an individually-paced format, the conventional way of presenting and organizing
learning is no longer effective. In other words, since the educational platform in which learning takes place has changed, there will be changes in dynamics of learning. Thus, a new design framework must be developed to address features of the new setting. This made examination of issues of online course presentation an important topic. Next I discuss two relevant issues. They are: 1) visual structure and 2) interactive and cognitive structure.

5.2.1 Visual structure: Student-content interaction

To a great extent the visual presentation of online course structure determines the degree of user friendliness. If designed from a learner’s perspective, it can further enhance the user’s confidence and satisfaction in interacting with the materials. The main instruments used are hypertext, links, colors, informational category systems. However, if web page designs are visually disorganized, or have internal irregularities across materials or pages, then there is confusion and frustration at the students’ end. Students commented on the visual presentations as “easy to work with” or “hard to follow.” This made it important to investigate the impact of presenting materials through web page displays and layouts. Two important factors are the display of information, or visual user interface design, and the browsing of information, or user interactivity. The format for displaying information through hypertexts and visuals is a key influence on users’ perceptual processing. User interface design manipulates texts, space, color, lines, indentation marks, etc. to format categories of parts of information. Technical terms such as text presentation and density and visual complexity (Berry, 2000) are used
in the literature to discuss relevant issues. Secondly, how information is organized in layers of hypertexts can also affect how students interact when browsing through information. *Browser mentality, navigation and wayfinding* (Berry, 2000) are used to examine such dimension of user-information interaction. As users browse through and navigate information, they began to decipher the underlying intentions or implications of the user interface design. For instance, placement of particular information under specific categories can suggest an underlying significance or meaning. These different factors of visual display design—text presentation and density, visual complexity, browser mentality, and navigation and wayfinding—can be major influences on learning.

Although students may not be aware of these technical terms, what they described as important seemed to center on these factors. They used “format of website” frequently to refer to the visual presentation of an online course. And they often used terms such as “understandable and clear,” “disorganized,” “well-organized,” or “got lost, and couldn’t find what I want” to describe their interactive problems regarding course designs in screen presentation. For example, on text presentation and density, students suggested avoiding lengthy and high density texts or long web pages without being broken down or highlighted, unless it was a document. If there were long pages, a printable version should be made available to download; it offered an alternative option for those who interacted with paper versions of long pages more efficiently.

In terms of visual complexity and accessibility, some students reported that a clear visual layout of all course components in the course homepage was critical. As people logged on to work on different components at different times, they needed to be
able to locate what they wanted in the first page view. Clarity and straightforward screen layouts were important factors as well. Labels, buttons, marks, highlights, etc. were punctuations to enhance visual perception of screen presentation. These could be seen as perceptual aids that helped them to understand what was presented. In general, students seemed to prefer a lower level of visual complexity in any one single screen display. Moreover, easy-to-browse visual aids which loaded quickly helped students to move through parts of the course content easily.

But why is wayfinding an important issue? When students suggested a consistent visual design and component layout throughout the program, it signaled that wayfinding could cause extra learner anxiety. Most of them recognized that the different course designs in the program were conceived by different professors who may have different visions of online teaching. And the variety of course designs was appreciated. However, they thought it would be better if there was a common format across all courses. They felt it would save a lot of time at the beginning of each new course trying to get used to the logic behind the design and finding ways of accessing pages of information. Four of them even suggested strongly that a consistent format of component visual layouts and organization should be adopted throughout the program. They explained that accessing information on the website would become easier from course to course. If they came to adjust well on how information was organized in the first course, they would have less anxiety to adjusting to new courses. From these suggestions, we see how visual and textual presentations of course content played a part in the online student’s information-processing and interactive response. Before and after they started the online class work,
they needed to learn the designing logics and presentational attributes and get familiar with them.

Visual elements should be created as deliberate navigation cues to support learning. This first group’s adjustment in learning to interact with hypertext content could be references for future improvements.

5.2.2 Interactive and cognitive structure

The delivery of educational experience online differs from a face-to-face classroom. In a face-to-face setting, instructor presents and directs the course activities. The instructor provides the context for the class interactions. But in the online classroom, students need to initiate the interactions. And what they rely on is the online course design’s interactive structure. Therefore, in addition to the visual presentation of online course material just discussed, the design of interactive structure is another critical factor. In addition, the interactive structure can be viewed as a cognitive structure that provides learning directions. In fact, when designing an online course, instructors built the cognitive structure into the interactive structure. Students obtain content understanding through engaging in course interactions. This is why cognitive structure is used in the literature (Guan & Powers, 2000) to examine the impact of course structural design on student learning.

Course structure provides a context for students to build cognitive understanding. Researchers argue that cognitive processes differ in online courses from those in traditional courses (Berry, 2000; Smith-Gratto, 2000). This is mostly due to the fact that
students interact with information as presented through web technologies, instead of teacher’s presentation of contexts. Contexts play a critical role in online students’ self-directed learning. Rogers (2000) said:

…Too often, Web sites are developed for instructional uses without the aid of sound instructional design principles. Content is presented as static, verbal information pages linked to other information pages that may or may not include obvious or intuitive navigational cues for making cognitive connections necessary for knowledge construction. That is, critical information is delivered in a potentially rich learning environment but the format of the presentation confuses or “loses” the novice learner… (217)

Hence, apparently the information contexts in a virtual space are more critical than those in a regular classroom. In the virtual space, students need to identify, develop, process, and reconstruct the contexts for themselves. This explains why the students suggested avoiding too much guess work on their end. This kind of user response reveals that somewhere in the given cognitive presentation they were unable to identify and develop the contexts for themselves. Thus, future design of online courses should pay extra attention to this dimension of cognitive structure. Course designers should ask themselves what kinds of connections are expected of students’, and how the connections should be made tangible and logical through assignments.

If we examine the relationship between an online course’s interactive structure and its cognitive structure, we see how they affect and one another. The interactive structure includes such elements as: student activity, assignments, discussions, tasks for community-building, etc. Cognitive structure includes how course materials, student interactions, learning objectives, and assessment criteria and expectations are incorporated. The important design questions include: “how do these elements combine
to facilitate students’ learning?”; “what are students expected to learn and achieve?”

These questions were among the most concerned topics in the group. The students wanted to understand why instructors presented the course structure as they did. They also wanted to know if they had achieved the standards that instructors set. As they worked in physical isolation, they were frustrated when they had to guess what some guidelines meant and what the logic behind certain activities and assessments were. This group had high motivation for performance, which explains why they cared much about the cognitive structure of an online course. They had high self-expectations.

It is likely that the above concern about cognitive structure is common among online students. But because the group members were all teacher practitioners, they had another concern regarding cognitive structure. That is, they especially paid attention to the cognitive connections between course materials, assignments, and their professional practice. When they were able to establish or discover meaningful connections between the two, they seemed to reach a high point of learner satisfaction. For example, the artmaking projects they did in the studio method course affected most students both personally and professionally. Therefore, the design of assignments to address one’s professional practice was another cornerstone for building an accessible cognitive structure in an online course.

The design of online class discussion is another important issue. Nowadays, the format of a threaded discussion board is frequently used to facilitate both individual and group learning interactions with content materials. In using this web technology, many problems and issues are worth further exploration. The problems are mostly resulted
from different formats or designs of threaded discussion board. These different factors
determine how threaded discussions are recorded, organized, presented, and retrieved.
Using time-based arrangements was very common. A topic-oriented format was also
common. Which was better as a learning approach? There are often both pros and cons
in any particular design. Some designs allow user more flexibility in choosing which
ways they prefer to organize and retrieve the discussion postings, but may be less
efficient to load large amount of information. This means more download time could be
necessary. While some designs are more efficient in handling large amount of
information posted but have less visual aids available when browsing through. In the
market, there are a variety of different formats of threaded discussion board today. For
future course development, more than one version could be evaluated on their pros and
cons to better suit instructors’ goals.

5.3 Some challenging issues and tensions of online teaching and learning

Previous sections have discussed presenting online course through web
technologies from a design point of view. In this section, I look at course delivery from a
distance educational point of view. The reason for the discussion is that there are often
tensions between teaching and learning in such an educational platform. Here, it is not a
matter of the pros and cons of course design. Rather, it is the underlying educational
implications associated with this new platform that one needs to consider. These issues
are what critics of distance education would focus on more than design issues. After all,
design issues are a means to an end, and can be modified to address specific purposes.
However, the educational issues that are central in online delivery often do not have clear answers. That is why I called them tensions. The following explores such issues that were important in our program experience.

5.3.1 Construction versus deconstruction

In the previous discussion of course design, one could see how students needed to actively construct their own learning experience. So it is logical that instructors need to break down course components and activities, or deconstruct regular class interactions into a series of components. The four instructors in the program all agreed that this was their primary task as a course designer—to break down the elements of learning and encourage students to make meaningful connections themselves. Since the instructor could not be the usual knowledge construction guide, the student had to assume the role of reconstructing the deconstructed information and materials.

How far did the content need to be de-constructed? To consider this issue, one needs to take into account both the student’s perspective and the instructor’s perspective. These were often in conflict because their expectations in the virtual classroom differed. For instance, students had a tendency to favor well-constructed guidelines. On the other hand, instructors had a tendency to favor more challenging tasks which do not have easy answers. Students often favored support and the obvious, while instructors favored challenges and the unobvious.

Nevertheless, this tension does not need to hinder online teaching and learning. It should be seen as an important underlying condition to be considered. One can use a
continuum to think of the impacts of these two different standpoints. On such a continuum, there is one end that minimizes learner’s freedom of choices and the challenge of learning, and another end that maximizes them. At the former end, students can follow what the instructor has defined as important and feels less challenged. At the other end students can have more liberty in defining what content materials mean and in applying them to their individual context. In other words, we can have more well-defined and guided learning but less user input on the one end, and less direction but more open space for user definition on the other end. The different points in between the two ends can be incorporated to address different learning objectives in different contexts. Hence, understanding this underlying tension could help both students and instructors to better use this particular online educational platform.

5.3.2 Self-efficacy and open learning

As I said in the last section, online students have more responsibility in constructing their learning experience and content understanding. This leads to the question of self-efficacy. Online students’ ability to grab the meanings of course activities is often associated with their development of sense of self-efficacy. When instructors place great expectations on students’ own knowledge-construction, their feeling of self-efficacy can be in jeopardy. The flexibility of open learning can contribute to students’ uncertainty. And self-efficacy in turn contributes to the overall learner satisfaction and confidence level, and ultimately the drop-out rate (Palloff & Pratt, 2003). One can see here that another tension is created. However, this is more of an individual
issue. Since it is a matter of self-efficacy, it is apparent that there is individual variance. That is, those students who constantly seek clear guidelines for self-directed learning may be less capable of coping with open learning. When instructors hope for individual’s creative content exploration, students may develop learner frustration as a result of uncertainty about what to follow. On the other hand, students who are more tolerant of open learning may prefer more user-defined than instructor-defined learning tasks. This explains why in some circumstances, some of the students voiced concerns needing more clarity about task instructions, while it did not seem to bother other students. This is why student’s learning style is a major topic of discussion in online distance literature. It is another important factor in the success of online education.

5.3.3 Degree of teacher presence: Student-paced or teacher-paced?

The degree of teacher presence is another major topic in the online distance literature. I focus only on one issue in this discussion: teacher presence in content responsiveness. For the online instructors, they needed to develop and prepare their online course well before it began, and after that they did little to modify earlier plans. Even if they saw some plans that seemed to fail to achieve their goals. But for online students, although they understood that this was self-paced learning, sometimes they still wanted to see a certain degree of teacher presence during the online learning. When teacher presence was less felt by the students, they felt uncertain. Therefore, we can see the tension being created here. On the one hand, online students appreciated flexibility of self-paced learning. Yet, on the other hand, they welcomed teacher’s presence to ensure
they were in the right directions.

Teacher presence in terms of content responsiveness is more complicated. In an online course, teacher presence is embedded in the course planning and the learning objectives. The instructors reported they spent most of their time in planning online course structure. This took many times more than the effort needed in planning regular classroom teaching. Their course plans needed to spell out detailed weekly agendas and assignments. This was very different from a traditional classroom where their course plans could be more open-ended to allow students’ learning progress to play a role in determining the direction of the class.

From a teacher’s perspective, this detailed course planning placed both instructional and technical limitations on their ability to spontaneously modify course structure. They felt less flexibility in terms of adjusting course materials and instructional strategies to meet students’ needs in a timely manner. In the traditional classroom, they could easily add changes and new ideas as the class proceeded. For instance, when they felt needs to try new instructional strategies, they could quickly assess if those changes worked or not. However, in the online classroom, when they saw needs to modify, they had to wait till the next term for adding changes. They understood that they could not change as often as they felt desirable in the online classroom, because it would generate uncertainties for the online students. One might assume that updating online courses takes little effort, since web construction tools allow real-time updates and students could see them immediately. However, this characteristic of web technology was not viewed by the instructors as beneficial. They would not sacrifice online
students’ security for this advantage, and update as frequently as they would like. Thus, here we see again how the tension between self-paced and teacher-paced derives from different standpoints of both parties.

5.3.4 Dialogical education versus self-directed education

Some argue that since online students’ construction of learning is based on information and activity guidelines which are static in nature, promoting critical thinking is less possible. The four instructors were aware of the limitations of online discussion. The usual spontaneous dialogical approach in face-to-face class interaction was less possible here. When they saw great online discussions taking place, they felt excited. But when the online discussions failed to focus on important issues, they could not always jump in to take the lead. Otherwise, the students might lose their voices and conform to the instructors’ inputs. Here, the previous discussion on teacher presence becomes relevant again. How much teacher presence should be felt in online discussions? To the students, this was an issue, and many expected to see more of instructor’s discussion presence.

Mazzolini and Maddison’s (2003) offer us some perspectives on this issue. They studied the effect of increased or decreased teacher presence in discussions on students’ resulting participation and the qualities of postings. They summarized their studies this way:

When facilitating asynchronous discussion forums, should online instructors be encouraged to take a prominent ‘sage on the stage’ role, a more constructivist ‘guide on the side’ role, or an ultra low profile as ‘the ghost in the wings’? There is no shortage of anecdotal advice on how to conduct discussion forums in online education… We found that the ways in which instructors post to forums can
influence students' forum discussions and perceptions, but not always in expected ways… On average, frequent posting by instructors did not lead to more student postings, and the more the instructors posted, the shorter were the lengths of the discussions overall. On the other hand, while most students rated their educational experience highly, instructors who posted frequently were judged on average to be more enthusiastic and expert than those who did not... (237)

As the quote indicated, the question is not as simple as just adding more teacher presence in the online class discussion. A few of the students raised concern that instructors could be more active in guiding and mentoring the asynchronous discussions, because they saw how discussions could lose focus. On the other hand, one of the four instructors mentioned that she often chose to let students run the discussion and kept her inputs subsided minimal, to avoid taking a lead. But she also recognized that students-operated online discussions could lose focus. This demonstrates another underlying tension in the online classroom.

5.3.5  On web-based communication barriers

One of the major revolutions that computer technologies have brought to distance education is making possible more interactive modes of communication. This is called computer-mediated communication (CMC). This section discusses two major forms of communication used in the program: threaded discussion boards and e-mail communication. My focus is on the communication problems that students raised

5.3.5.1  Threaded discussion board

Threaded discussion board is now a popular tool for facilitating computer-mediated communication in online distance education. Another tool is real-live chat
room which transmits messages among different parties synchronously in real-time fashion. Threaded discussion board works on an asynchronous basis but serves more purposes as an information organizer. Asynchronous discussion board has the following major recognized benefits (Cheung & Hew, 2004). First of all, asynchronous online discussion increases accessibility and opportunities for sustained interaction and well-constructed response. Secondly, asynchronous online discussion can break down social barriers among participants with different social backgrounds. Third, asynchronous online discussion encourages more thoughtful and reflective responses. In terms of its educational significance, research has supported online discussion for promoting more constructive and productive mode of communication in learning situation (Chang et al., 2003; Chen et al., 2003; Cheung et al., 2004; Hood et al., 2004).

The benefits of online discussion board are already demonstrated in previous chapters on community-building and reflective learning. Here the focus is the problems that people encountered with this tool. If we understand better its limitations on learning and class interaction, it would help our future improvement. Five problems were raised by students: 1) communication misinterpretations, 2) disorganized communications, 3) communication delay, 4) losing focus in communication flows, and 5) losing personal voices in communication.

5.3.5.1.1 Communication misinterpretations

In an information exchange setting such as the online discussion board, students interact with stored and categorized information repertoires. Strictly speaking, it is not a
person-to-person kind of communication. Pincas (1998) and Thomas (2002) argue that students interact with information (posted messages by other members)—which are displayed in a different context (time and space)—rather than with people. This called for a relevant communication design to facilitate online learning. The contexts in which particular information is stored can be different from the contexts in which they are accessed, retrieved, and interpreted. And when a posted message is interpreted in a different context, its original meaning can become fragmented and might be misinterpreted.

Although students in general were able to communicate freely in discussion board, they said that the communication difficulties they encountered also depended on the time, context, situation, topic, etc. For example, comparing the online discussions on intellectual issues versus political issues, people might find more communication difficulties in posting viewpoints on the latter. This is due to the possibility that messages might be misinterpreted. Or, people of different geographic locations may interpret posted comments differently, since the time a posting posted maybe different than the time it was retrieved and interpreted. And a pessimistic posting maybe more tolerated if it was posted at mid-night instead of in the day time, for example. A message can always be interpreted differently, sometimes even with conflicting positions, and students were aware of this potential problem. These contextual variables are documented in the online learning literature (Chou, 2003; Girardeau, Hundhausen & Suthers, 2003; Wade, 2003). Below is a student’s comment where she described this virtual communication situation as a hyper-realistic kind. Her recognition that this kind
of communication medium allowed for both truthful and false communication reflected what many people felt about online discussion. She reflected:

…The Internet creates an odd juxtaposition of anonymity on one hand, and exposition on the other. While our thoughts seem private, we actually have no problems spilling them into a computer for all to see. (i.e. anything J writes to me.) This "medium" allows us (and our students) to be more truthful and more false at the same time, which, to my way of thinking, is hyper-realistic, very cool, and brings us closer to God. What do you think? (Message ID No. S2-391DA)

5.3.5.1.2 Organized or disorganized communications?

For displaying information, WebCT’s design of threaded discussion board automatically categorizes postings in terms of time, threads, author’s name, or subject heading. It sounds like an effective information organizer. However, when students attempted to retrieve information, it created challenge for them. For retrieval purposes, the number of discussion postings at an average of 500 postings or so in each course made it hard to sort through them. On the one hand, the discussion information was organized on the basis of “who posted at what time under which thread.” On the other hand, the discussion was about content and the information was disorganized because the content of the postings could not be listed simultaneously. For instance, discussion postings could not be sorted to view specific content information within a page display. Yet people often accessed the information for different purpose at different times. Sometimes, they wanted to browse peers’ assignment postings. Other times, they wanted to see what a particular person had to say about certain topics. In such circumstances, browsing through postings just to read if the content was relevant became a time-
consuming process. To solve this problem, more versions of discussion board designs could be evaluated for their options of organizing information.

5.3.5.1.3 Communication delay

Sometimes an advantage in one respect could be a disadvantage in another. It is often so in the case of discussion board communication. On the one hand, students appreciated the equal opportunity, freedom, and flexibility of adding messages to initiate or join ongoing conversations. They were able to sit and watch the ongoing discussions and jump in when they felt like adding a comment. They got to choose what to respond to at what point in time. This made them feel more confident and secure in offering intellectual contributions. A student said:

…with online learning it is easier to have a voice and participate when and where you wish. In a regular class the discussion often gets derailed and you never have a chance to contribute or make a point. With the online learning you always have the opportunity to communicate with a person within the group or individually through email. Issues can be revisited and clarified.

Another student said:

…working online, on your own schedule, and at your own pace, allows more freedom of expression. For me I tend to be shy, and talk less in a group. When I am in such a diverse group I feel that others communicate the same ideas more eloquently. When I am online, I feel that I am able to speak my mind, and take the time to think through my ideas. I was never good at debating…

On this side of the coin, the flexibility of discussing any time at one’s convenience and learning path made discussion board a productive educational tool. But, on the other side, the time flexibility generated a problem of communication delay. Since students logged on to the course site at different times, there was no guarantee as to how long it took to
get responses from the others. The waiting time to receive interactive responses could
generate a feeling of being left alone. Such delay could lead to the losing momentum of
communication, and cause students the anxiety of seemingly speaking into an empty
classroom (Cheung & Hew, 2004).

Three students admitted that this problem of delayed response in discussion board
communication often caused frustration to them. They said that in a face-to-face
discussion, their comments were responded to right away. But in the online discussion
their postings could be left uncommented on when they expected others’ feedback and
remarks. In such cases, the individual’s freedom to respond on which threads of
conversations sometimes became an obstacle to ensure equal attention to every
contributed thought. One student said that when her posting was not responded to, she
felt unheard and therefore discouraged, especially on those topics which she really
needed to hear what the group thought. Another said she often felt frustrated due to the
days that it took for others to respond to her postings. What we learned from this
frustration is that no matter how advanced technology enables us to communicate without
being present, we still need to be heard and understood by others, and online education
needs to address this human nature.

5.3.5.1.4 Losing focus in communication flows

The liberty to speak up in discussion board could often lead to off-track
discussion. Students noticed this problem as they began to write frequently. Some of
them reported that as the courses proceeded, more off-track postings were created.
Sometimes, these off-track talks could be too lengthy to browse through. While they recognized this problem, some did not view it as a serious problem as others. They thought the side conversations or out-of-focus discussions were a form of democracy in a social community, as well as the inevitable path of learning. Moreover, these side developments often revealed members’ personalities and their agendas which were valued thought important. On the other hand, for those who thought this was a problem, they found that the momentum could be harder to maintain than in regular classroom.

One student wrote:

The Internet is great for providing and receiving information. But this is what I'm beginning to think about discussions...they are exactly like Pepon Osario's El Chandelier.... They are full of stuff. There is a lot of everyday "junk" in them. There is an underlying structure that often gets hidden. There are gems, but you gotta look for them. There is no focal point.

This is why some students, as mentioned earlier, would like to see more teacher presence in mentoring the discussion board interactions.

5.3.5.1.5 Losing personal voices in communication

Social presence in online educational communication is yet another popular topic in research. It is interesting that researchers disagree on whether CMC is impersonal and very personal, and for the same reason. For those who argue it could become more personal than face-to-face communication, CMC provides a platform to allow personality to come into play. However, for those who argue it diminishes personal touch and voices, CMC provides a virtual fence to hide from real emotions. From our program experience, both positions seemed to be valid in different perspectives.
One can argue that our two-year program developed a strong social community which then allowed authentic personalities to be present in the virtual classroom. Students could engage in CMC without feeling like they were talking to strangers. The program outcomes demonstrated that even though this group only met each other in person for three weeks during the three summers, their friendships and social bond to this group apparently outshone that in any regular on-campus class. A strong evidence of their personal presence in the CMC mode was that they could easily identify the author behind a posting from the writing and so could the instructors. This was because the group had come to understand each personality well through the online interactions. On the other hand, one can also argue that in some degree the CMC resulted in some impersonalized communication that made people frustrated and feel isolated. One student voiced this concern as a serious problem to her. Her preferred learning style demanded a more personal way of making communication. She tried to make the “soundproof” or “silent” online discussion communication more personalized and more alive. She felt that equal opportunity of the CMC mode took away the dynamics and excitement of face-to-face communication that enabled spontaneous interactions which revealed the personalities of individuals. To make her muted online expressions more alive, she often tried to use capital letters or messages full of personal emotions to reveal what she was feeling at the time of posting the message. She reflected:

...I very much wanted my personal presence to be felt, and I enjoyed sensing a personal presence in the communication of others. I tried to impose my personality whenever I could, and as outrageously as possible. I wanted my words to become a face and a voice and a gesture. On-line communication is lonely. I don’t like the feel of it, though the convenience outweighs my discomfort. I found myself writing less and less flamboyantly as time went on, and more in the way people wrote to me—impersonally...
Although this participant was the only one in the group who lamented the loss of personalized ways of communication in a rather lonely social environment, her feeling represents a major quest in online education research today: trying to maintain the human element in a technologically-aided interactive environment. Although this problem was not considered important by the other students, we do see how on occasions they tried different techniques to make the communication more personal. For instance, they would use different colors, text sizes, capital letters, or more space in between important ideas to convey what they wanted to say. As the student quoted above said, the convenience of CMC surpassed the discomfort of losing personal voices. This seemed to be the majority’s view in coping with the CMC platform. Still, it is important to understand this characteristic of online classroom communication.

5.3.5.2 E-mail communication

All four instructors used e-mail communication heavily in their online courses. They mainly used it to establish personal connections and correspondence with individual students as well as the whole group. With e-mail to the group, it was often to inform of class progress and modification of course materials, etc. With individuals, however, the e-mail tool served to make personal communication between instructor and students more direct and private. On the use of email as the primary tool of personal communication, all students reported that they felt very comfortable exchanging anything, including their academic, personal, and professional lives. One student especially noted about the trusting relationship that she had gained through interaction with her instructor via email.
for personalized communication. It made her feel a private communication channel was built with the instructors.

Research has shown that the average tolerant waiting time for loading a web page was less than 5-10 seconds. Beyond that, people would give up waiting for the page loading. It is similar with email response time. Students reported on such tolerant level of waiting time. Three students commented that when their email to the instructors was not replied to in a few days, they felt helpless. When a timely response was given by the instructor, their learning spirit was encouraged and they were reassured that the instructor cared. Usually a day or two of response time was considered positively by online students, and a reply that took than a week was discouraging. But of course, everyone had a life other than being an online student or instructor. Therefore, a few cases of delayed responses were taken as rare. Nevertheless, responsiveness in a timely manner on the instructor’s end did contribute to online students’ rating of online instructors’ professional reliability and personal consistency.

5.3.6 Feedback and assessment issues

As said in earlier sections, teacher presence was less felt by the students in online discussions. Teacher presence was largely built into the course design and structure. This leaves the feedback and assessment response as important keys to ensure students’ awareness of teacher presence. In giving feedback and assessment responses, instructor conveyed his/her ongoing monitoring effort as a supportive guide to individual students. From the student’s side, he/she could be more motivated by knowing that his/her
performance was evaluated and supported. When the instructor’s feedback on assignments or projects was articulated in constructive details, students felt appreciated. This was demonstrated in the previous chapter on community-building where the instructor’s presence encouraged a caring relationship among the group.

Instructors could give feedback in public or in private. Often times, students were more anxious if private assessment feedback was delayed or unclear. Some of them reported that when they did not understand an instructor’s feedback, they were less active to ask for further clarifications because they were afraid that they maybe the only one who did not understand. This is why almost all of them suggested more clearly-defined assessment criteria and learning objectives. They reasoned that they could set clearer goals if given clearer assessment approaches and more visible philosophies behind them. As for the content of assessment feedback, students seemed to favor critical suggestions accompanied with encouragement to get them going.

5.3.7 Time issue

Time allocation is always a big issue in any learning. Someone used to say that energy plus time equals learning. Students reported that a clearly-specified timeline on assignments and activities was very important to them. Allocating realistic amounts of time meant effective learning for students. A clear timeline for each assignment and online activity helped them set personal learning goals. A loose course activity structure gave them less pressure than they needed to live in their different roles in life, such as teaching, parenting, and maintaining a personal life. When the timetable of course
activities and assignments was loosely designed, many reported that they felt a sense of disorientation and could not work effectively. They often sacrificed online work due to other life obligations. Although one may argue that a loose design in activity structure might promote flexible student learning, it was not the case in this program. Many of them stressed the need to have a specific and workable schedule to follow.

The online student wanted to have a sense of control over the online learning process. He/she wanted to plan ahead how much time was needed and how much effort he/she needed to commit, because he/she had other life obligations and duties to fulfill. He/she did not like surprises or unexpected situations to rise in the online classroom that required change of learning style and time management. Once an online student first browsed through the course site from introduction, syllabus, time schedule, weekly assignments and activities, to assessment guidelines and final project details, he/she had already started planning in his/her head about the time needed.

5.4 Student’s adjustment to technical challenges in the virtual classroom

5.4.1 Anxiety about technology

Technology anxiety has been documented as an important factor determining online student success and even drop-out rate. Online students need to be a problem-solver and know how to get help. On the issue of adjusting to web technologies in online learning, students’ responses pointed to a truth that has been documented in online learning research. That is, people who are more literate in computer technology prior to the program had more strength in dealing with technical difficulties, even though the
situations were new to them. On the other hand, people with less experience of computer-related problems were more fearful and easily frustrated when problems came. In this group, only 20 percent of the members had significant prior experience with computer technology. Others felt that they spent a lot of time trying to solve computer problems at the beginning of the program. They encountered two major tasks. First of all, they needed to be familiar with the functions of the course platform WebCT. Sometimes, problems could occur during transferring files, posting assignments, saving files to the web server, etc. Then, they also needed to be able to solve problems within their own computer system, such as missing files, losing fragments of data, virus attacks, system crashes, operating system incompatibility between PC and Mac systems.

However, as the program proceeded and they developed more capacity in working with computer, they felt a sense of accomplishment when they found the solutions themselves. Most of them mentioned this feeling of achievement after completing their construction of a website, which was required by an early online course. They spent a lot of time learning the tactics of constructing a website and presenting their learning process through the electronic portfolio. In the end, they were thrilled about how everyone finally finished the project and felt great to have conquered the technology. Still, four participants said that learning to compose web pages and a portfolio made them spent too much time dealing with technological problems. They thought it was too technologically demanding on the online student. Most of them recommended that the program should clearly describe what computer and web technology skills were required in the program guidelines. It would help to ease anxiety and fear. Some recommended a separate
technical manual to accompany with the program guidelines. A “Frequently Found Problems & Asked Questions” could be included in the program guidelines.

5.4.2 Technical assistant/specialist

Students’ capacity to handle computers leads to the question of whether a full-time technical assistant was necessary. Those—80 percent of the group—who viewed working with computer as a big challenge thought a full-time technical assistant is a must in an online program like this. Some said that they thought having a full-time assistant is critical at the beginning but an optional thereafter. Nevertheless, they all felt that a full-time technical assistant in standby for whenever needed would ease much of the learning frustration at their end when things went wrong. When technical assistance was not available they often ran to friends, colleagues, and personal networks to find solutions which may not have been good ones.

In addition, many students felt that they were more comfortable asking technical questions of the technical assistant than the instructors, whom they felt comfortable to ask only academic questions. Part of the reason was that they understood instructors were busy with their on-campus tasks and might not be in constant standby to offer technical assistance.

Students’ expectations for an ideal technical assistant were very similar. First of all, such an assistant should have knowledge about both art and computer. Secondly, he/she must be patient regardless of how much time it takes to solve a problem. Third, he/she must be sensitive to students’ frustrations. And finally, he/she must be able to
give clear technical instructions. These common descriptions indicated that online learners in general need human comfort as much as technical expertise from a technical assistant and help in dealing with their fear of not being able to tame technology all by their own. Three participants especially remarked that they thought the technical assistant must be able to take ownership of the program and care about students’ learning.

5.5 Conclusions and summaries of recommendations

This chapter has analyzed possibilities, issues, and problems in facilitating online professional development through web technologies. It is important to maintain ongoing reflections on such related questions, because critical examinations can help improving ultimate educational qualities in distance learning.

According to a renowned researcher in humans and computing, Shneiderman (2002), study has showed that 46% of time is lost to crashes, confusing instructions, navigation problems, etc. He has advocated more humanistic approaches to computer application designs to improve user experience. Therefore, we should never be satisfied with currently available technologies without considering their impacts on learning. One of the missions of online education research is to maintain a critical eye on those impacts on human learning is. Next are summaries of recommendations for future program modifications.
5.5.1 Creating a program manual guide

A program manual guide can serve as the resource book for students. It could include the following elements:

a. About the program: its purposes, goals, and expectations;
b. Timeline of the program activities: course sequences and summer meeting agendas; calendar of university and program activities for the two years.
c. About action research: time table for conducting the research, expected progress; format and style of research writing and referencing style; example of past research to demonstrate expected quality.
d. About the instructors: their personal and academic background, research interests, welcome words, expectations for online teaching;
e. About the technical issues: course platform user’s guide, technical help contact information;
f. About transfer credit information: the procedure of credit evaluation;
g. About the university: website, resources sites, etc.
h. About netiquette: some guidelines about online social behaviors.
i. FAQ section.

5.5.2 Separating formal from informal discussion rooms

The separation of formal class discussion on assignments from informal discussions on personal chi-chat was appreciated by the students. This change was made in one of the later online courses. Students encouraged a consistent setup in the discussion board across all online courses. They wanted to sort out quickly what they wanted to work on for different purposes at different times. For example, sometimes they just logged on to say hello and to share something personal. Other times they logged in to read peers’ assignment postings, or, to participate in class discussion on course materials. An online course’s website can generate hundreds of messages and it could become a burden on the students’ part to dig through information.
5.5.3 Determining one’s action research topic early in the program

Students recommended that future programs should require participants to decide on a topic for action research early in the program. This would allow more time to conceptualization, execution, and final reflections to share with the community.

5.5.4 Documenting learning via electronic portfolio

In teacher education, electronic learning or process portfolio has been increasingly adopted as a tool to document pre-service teachers’ learning outcomes. In many of these institutions, it has replaced conventional paper format of teacher portfolios. With electronic portfolio, more flexibility in updating information and more possibilities of presenting information are made available. For example, images, texts, colors, links, audio and video clips, and documents can all be incorporated to the portfolio. Electronic portfolios could be accessed through the web, or being burned into a compact disk for easy retrieval and storage. It could be more interactive in terms of how reader can access the information. This web learning tool was used in the studio method course. Students were required to compose web pages with images of their own artworks, personal journal recording and commenting their artmaking process, project reflections, and also lesson plans. Overall, students’ reactions and comments on the learning outcome of constructing the electronic portfolio were positive. The instructor of this course was also satisfied and impressed by the impact of this web tool in documenting individual learning. Thus, most of them suggested implementing this learning tool throughout the program.

However, the technical part of the webpage composition made many students
experience much technological anxiety and frustration during this assignment. They appreciated the learning outcomes, but at the same time they felt they spent too much time on dealing with the challenges. I think many of the problems could be eliminated by considering a more custom-made web journal publishing tool, so that they do not have to spend much time to create the layout from scratch which was mainly what caused the problem. As I continued to examine new web technologies in online distance education, I found that since 2002 a much more user friendly and simple tool was made available, and has become adopted in a fast rate, for it is a free shareware. It is the so-called WEBLOG or BLOG. It is now the newest tool for writing and documenting personal journals online. Many websites are constructed using BLOG. Texts, images, links, multimedia can all be incorporated. BLOG is commonly seen as an efficient tool to compose web journal. The best part is that no knowledge on HTML language is required in BLOG. As students’ technical assistant, I found that many of the technical problems students encountered were HTML-related computer language problem. But with BLOG, one does not have to “make” the web page, instead, they choose a custom design and update files and information, and that is all. Thus, I recommend using BLOG instead of using HTML-based software to create electronic journal.

5.5.5 Documenting class progress in public

Students commented that having a recording tool to publically display all class progress made a difference to them. Because of the nature of the virtual classroom, one could not easily tell how the other class members were doing. They were of the progress
of the other students. When a learning community developed, people cared much about how the whole class learned and its progress. In the art criticism course, such a design was available. A page was devoted to record ongoing members’ progress through a visual display. It was a graphic chart made of a grid with the horizontal row on the top indicating each assignment required, and the vertical column to the left indicating all students’ names. When a student turned in an assignment, a checkmark was generated. This made them understand better where they were compared to others. Based on this experience, we learned that making class activities and learning “virtually visible” to online student was important. It also helps to foster a sense of learning community.

5.5.6 Establishing consensus among faculty members on e-responsiveness

The style instructors adopted to respond to students in the online classroom varied. The faculty could establish some common guidelines about the responding system to make students feel more secure. For instance, when students’ email was received, instructors could send a short response indicating the message is received and informing students when there will be time for detailed response. Moreover, when instructors are out of town or unavailable for course responses, they could send a message indicating the duration of their expected absence. These systematic approaches on sending e-responses would reduce students’ anxiety and uncertainty on waiting time.
5.5.7 Establishing ongoing conversations regarding course structure

A discussion area especially devoted to conversations on the impact of assignments in terms of course structure can be helpful to further communication between students and instructors. Students’ comments on the course structure could inform instructors’ future design and understanding of the impacts of course design on student learning and perception.
CHAPTER 6

SUMMARY AND IMPLICATIONS FOR ON-LINE IN-SERVICE ART TEACHER EDUCATION

6.1 Summary of the study

Online distance education literature and research has seen a development from the earlier phase of anecdotal accounts, prescriptions, and rather scattered research efforts in the early 90s. Since then it has flourished and grown rapidly to become elaborated and sophisticated in theories and applications. It has re-conceptualized how to go about education that reflects and takes advantage of the uniqueness of the virtual classroom. Within this broader context of online education research, this study situated itself specifically in the overarching sub-domains of online professional development, virtual learning communities, and the new paradigm of online teaching and learning. Each of these sub-domains has its own sub branches of research topics. My study here examines only a few issues in each domain that were relevant to our program purposes.

The fifteen participating online students’ learning and interaction posted in the online classroom, as both individuals and as a community of learners, was my primary source of study. I have documented and explored these program results from these three major issues. These issues were: 1) development of an online learning community, 2)
development of teacher’s reflective learning, and 3) applications of web technologies in the online classroom. Using an ethnographic approach, the qualitative significance of the educational results was analyzed and interpreted. I discussed different dimensions of each of these issues in a separate chapter.

Through a participant observer’s interpretive stance, the data has shed light about which possibilities of learning can be facilitated through online delivery. The web technologies were able to expand the reach of in-service art teacher education to an off-campus audience. The program was able to bring diverse backgrounds of practicing teachers together to engage in a prolonged professional development effort. These practicing teachers reported that they had gained greater professional insights and benefited from networked professional exchanges after the two-year program.

This study identified and exemplified different feasible educational outcomes of in-service education facilitated through online distance approach:

1) First of all, the participating teachers were able to construct relationships between theory and their daily practice to a useful level. The online classroom made it possible for them to undertake such learning because they remained in their daily teaching positions.

2) Secondly, they were able to engage in reflective learning process as a result of the online participation and community involvement.

3) Third, they were able to build a socially-connected virtual community at a distance, and to benefit from social support and collaborative learning.

4) Fourth, they were given the opportunities to become familiar with current online technologies and enhance their learning.

However, the current online distance tools were not without limitations. For example, communication barriers could occur in the online classroom which depended on
computer-mediated medium. Such barriers include disorganized communication, miscommunication, communication delay, loss of focus in communication flow, and lose of personal voices. Sometimes, these barriers could hinder online student’s learning interactions, or his/her social presence. But individual students had different opinions regarding to the degree of these barriers’ impact on their learning. Some reported to be more concerned about communication delay, while some others were more concerned about lose of communication focus.

Moreover, there were some issues regarding the transition to teaching and learning online. This new educational delivery platform has resulted some fundamental tensions and challenges between teaching and learning. First of all, instructors may seek for more creative and active student response in meaning-construction, but most students would rather see a more constructed approach to avoid uncertainty on their end. This is related to the second tension. That is, as instructors tried to encourage more open learning and provided loosely-structured course, this could affect students’ sense of self-efficacy. Online students in general tended to seek more structure in online classroom than they would in a conventional one. Third, students seemed to prefer for more degree of teacher presence in online class interactions, especially in discussion board. Fourth, as instructors tried to promote self-directed learning, they tried to let students take over the discussion, but this resulted inevitably in less spontaneity that was possible in face-to-face dialogical education.
6.2 Summary of findings on what was learned as success factors for online professional development

We have learned that quality online learning rests on the following factors:

1) High and positive student motivation, which stems from the desire to improve one’s practice;

2) Strong social relationships among students, which promotes active commitment and is significant to foster practitioners’ theory-practice translation and reconstruction as a learning community;

3) The instructor’s role as a caring supporter and mentor, which then encourages students’ self-directed learning;

4) A course structure that allows high interactivity among students;

5) Students’ personal/professional contexts are incorporated into online learning contexts, which helps them find the value of online work;

6) An online course structure that is inquiry-based rather than skills transmission-based, so that students have more opportunities to develop reflective learning;

7) Course structure is respectful of individual path and learning style. That is, students’ individual learning curves are not held against them but instrumental in providing teacher more individualized instructional approach.

6.3 Summary of recommendations for future program design and implementation

The followings are major recommendations from a design and implementation’s point of view. An online professional development program could be strengthened by these considerations. They are a combination of my program experience and observations, and suggestions from both students and instructors.

1) Develop a consistent layout of course components and website interface, such as consistent assignment posting methods, separation of formal and informal discussion areas, and showing individual student’s progress to the class.

2) Develop a website to host and manage students’ electronic learning portfolios,
and keep it constantly available in the two years for students to update information.

3) To allow 1) and 2), owning a separate server other than the university-wide online course server would be better. The university system often makes past online courses inactive, which prevents further retrieval and continuous updates.

4) To facilitate an electronic journal, the department could consider using the WEBLOG (or BLOG) system which has become popular now as a personal online publishing tool. It works like an electronic journal. Students do not have to have homepage-composing skills. They can easily update texts, images, and multimedia files onto the electronic portfolios with chosen layout and interface. BLOG has become the new technology in computer-aided education since 2002. There are other advantages, but an important one is that the department can link all students’ electronic journals for all groups, and create an electronically-linked professional community for all the online program alumni. More details on the functions of BLOG can be found in http://www.blogger.com/tour_start.g; or OSU website: http://firefly.lima.ohio-state.edu/

5) Build a consensus among faculty members on providing a consistent feedback system, such as immediate feedback, if only just for acknowledgement, and absent-notices beforehand during the course period.

6.4 Implications for in-service art teacher education

Since the late 80s, teacher education has become a major focal point in education reform because teachers were seen as the major catalyst to improve educational quality. Long-time veteran teacher educator Linda Darling-Hammond (1996, 2000) has been advocating the improvement of teacher training to make it more authentically responsive to the realities of teaching. Her study (Darling-Hammond & MacDonald, 2000) showed that, to accomplish so, teacher training should have the following elements:

1. Student-centeredness. This means that the practical knowledge base of student teachers should reflect their individual reality and experience;
2. Community emphasis. This refers to fostering strong communities of learning;
3. Social and moral commitment. This refers to strong commitment to the moral purposes of teaching and social possibilities of education;
4. Constructivism. This refers to the curriculum approach of the program;

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In retrospect, the web technologies in the online classroom were able to fulfill the above goals of teacher training. It facilitated individual-centered learning, community engagement, social relationships, knowledge-construction, and ongoing reflections on practice. Despite the fact that the facilitation is done at a distance, technologies make it possible to allow students to be connected virtually to the same learning community. For in-service practitioners, this could be a doable, cost-effective way of connecting oneself to larger professional learning community. The virtual community encourages teachers to reflect on their practices and articulate their teaching philosophies. Schön (1983) already urged this long ago. He said: “Awareness of one’s own intuitive thinking usually grows out of practice in articulating it to others” (p. 243).

For in-service art teacher education, this online approach is even more significant, because art education has experienced major paradigm shifts in the past decade, and yet most of today’s art teachers were educated during the DBAE era. Since the DBAE era, more perspectives have been brought to discussion, including multiculturalism, postmodern socio-cultural conditions, popular culture’s influence, visual culture study, cognitive learning in the arts, integrated approaches, art assessment and standards. There has been a gap between teachers educated in the DBAE paradigm and contemporary educational situations. The research community has urged art teachers to take more approaches that address contemporary postmodern conditions in the arts and culture (Cary, 1998; Efland, Freedman, & Stuhr, 1996; Gaudelius & Speirs, 2002). However, teachers are often reluctant to incorporate their recommendations in the classroom and
guide students to examine contemporary issues. An opportunity to discuss contemporary issues with a peer support network which brings multiplicity of viewpoints can help teachers to further understand contemporary art education paradigms.

This gap between scholarly research and school practices seemed to be bridged in our online classroom. For example, most participants reflected that they were previously aware of visual culture, postmodern and contemporary arts conditions, and multicultural trends. However, it was only after their engagement in the online classroom that they were able to join in collective critical analysis of their classroom practices and try out new approaches. Whenever they learned something they could immediately relate to their practice and they became more confident and more reflective in infusing such new dimensions into their own classroom.

The evidence for this is in part that in their post-program reflections they identified in detail how much and in what ways this program had changed their practice. For instance, they became clearer how to implement integrated art curriculum. They recognized the importance of continuing learning as a teacher to improve practice. They became more capable of examining new dimensions of art education with confidence. In summary, the online program proved to be a very practical approach to promote better teaching and curriculum reform in art education.

6.5 Recommendations for future research

There are some issues that demand further research for better understanding of online distance education in general and in-service professional development in particular.
First of all, for university art educators, the online program implementation could also inform them the daily context of K-12 art teacher practitioners. It also opens up for them new opportunities for research. More research can be explored on teacher thinking, reflective teaching, and teacher action research. Moreover, using an online professional development group as the subject of study, researchers can gain more direct access to study how teacher develops personalized practical theory. My study can inform future researchers for a fuller examination in such areas on teacher’s practice.

Secondly, the online program had succeeded in building a professional learning community with a rather small scale of fifteen participants. But in district-wide or state-wide projects, expanding to larger groups could be beneficial as well. Building a large scale professional learning community online could be one future direction to work on.

The third recommendation is about online student development. My observations of the participants’ interactions and changes within the two years led me to discover many issues for further investigation. That is, while my study looked mostly at group interactions and development, the individual students’ life in the virtual classroom is also important. I found that in some cases students evolved to different personalities that were not found at the beginning of the program. For instance, a student who was somewhat opinionated about almost everything at the beginning later became sympathetic to others’ feelings and viewpoints. Whether this was attributed to social relationship or intellectual development needs further study. My point is, to study single individual student’s change is equally important.

Fourth, with the findings of this study in hand, the department has more
understanding about what an online master’s degree program could achieve and how it can be best organized. Since this was an interpretive study derived from my reading of this unique social and learning community, further research focusing on a similar online program by different researchers could offer alternative perspectives.
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