The Sociocultural Implications of Learning and Teaching in Cyberspace

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Over a decade ago, I voluntarily immigrated to the United States from Brazil for purposes of educational growth and emancipation. I was born and raised in a metropolitan area of southern Brazil that I would describe as progressive regarding its commitment to social reform on behalf of the poor. However, leadership opportunities for women were minimal, reflecting the social and cultural beliefs of traditional male-dominated Brazilian society, where men hold leadership positions in political, administrative, and business settings and women perform the traditional role of caretaker in the home and workplace (Hayes, 2001). Feeling powerless to move on professionally, I decided to obtain education in a new context.

Even though immigrating to the United States freed me somewhat from traditional female roles, it challenged my assumptions about my learning. I came from a culture where group cooperation was emphasized, time was relative, thinking was holistic, affective expression was evident, extended family was the norm, the worldviews of other cultures were generally accepted, and interactions were socially oriented. In Brazilian culture, I displayed a field-dependent cognitive learning style, which is relational, holistic, and highly affective. A cognitive style comprises perception and personality and affects interpersonal behavior and the way a person processes information. A field-dependent cognitive style is characterized by a personality that presents characteristics of being socially dependent, eager to make a good impression, conforming, and sensitive to social surroundings. Conversely, field-independent and analytic thinking with limited affective thinking are characteristics of the Euro-American cognitive learning style (Sanchez and Gunawardena, 1998).
Moving to the United States and joining its higher education system required that I adapt and expand my learning style to accommodate the independent cognitive learning style of my new environment. Cyberspace education was central to these changes in my learning. During my years of graduate study in adult education, I discovered that learning how to use a computer was instinctive to me; later, online education became a way to communicate and interact with others in a socially independent environment since its social activities are independent of time.

Contrary to the educational system in the United States, my previous experiences in the sociocultural context of Brazilian education entailed progressing through college with the same group of classmates, the turma (cohort) approach, from entrance to graduation. The American system of education posed a different social infrastructure. This change in infrastructure required a shift in my learning approach; for instance, I had to be self-regulated. Technology allowed me to adapt to the new learning style by becoming a more independent and task-oriented person. In the process, I realized that using computers as a tool for learning and communicating, and cyberspace as the context of learning, was transformative and emancipatory.

In this chapter, I use my own experiences as an adult learner in cyberspace and the adult education literature to explore the social and cultural contexts of gender and national origin and their implications for learning within an online community. I draw from the individual and the contextual approach to learning as the perspectives to guide reflection on my experiences within the context of adult education. I conclude the chapter by offering practical implications of learning and teaching in cyberspace.

Defining Cyberspace

In this chapter, cyberspace refers to the online environment that is accessible to learners and instructors who are separated by time and physical distance. Cyberspace learning involves using personal computers (clients) linked to a central host computer (server) by a local network, telephone line, or data network. The instructor and learners use their client computers and modems to connect to the server. The server runs a conferencing software program such as WebBoard or First Class or a course management software tool such as Blackboard Course Info, WebCT, or Learning Space. Learners have twenty-four-hour access to the server and can connect to it to receive messages from or post messages to other participants. Online learning assumes participation in instruction that is entirely online, without face-to-face interaction.

Perspectives of Learning

According to Caffarella and Merriam (2000), learning in adulthood is usually studied from two perspectives. One focuses on the learner as individual, while the other centers on the contextual approach to learning. The first
perspective looks at the learner and responds to individual learning styles to help adults learn efficiently. The contextual perspective focuses on two dimensions, the interactive and structural. The interactive dimension recognizes learning as a product of the individual interacting with the context of learning, while the structural dimension acknowledges the social and cultural aspects that influence learning, such as race, class, gender, ethnicity, and power and oppression (Caffarella and Merriam, 2000).

Since the adult education literature that is related to these perspectives make little reference to learners’ experiences in cyberspace, adult educators are beginning to raise questions as they design and deliver such instruction (Caffarella and Merriam, 2000; Merriam and Caffarella, 1999; Hansman, 2001). My own experiences as a learner in cyberspace, guided by the individual and contextual approaches to learning and the current adult education literature, may provide some insight to this phenomenon of learning in an online environment.

My Perspective as a Cyberlearner

My perspective as an individual learner in cyberspace is based on three major concepts: (1) participation and motivation are necessary to function in an environment that lacks physical presence, (2) self-direction is necessary for successful learning without face-to-face interaction, and (3) transformational learning allows personal and social construction of knowledge because of the opportunity to interact with others (Caffarella and Merriam, 2000; Garrison, 1997; Clark, 1993).

Participation and Motivation. Participation in cyberspace is typically through written communication. Contributions to class activity are reading and writing assignments. For instance, comments are documented, succinct, and pithy thanks to the logical structure of the language (Conceição-Runlee and Reilly, 1999).

Motivation is defined by Garrison (1997) as the “perceived value and anticipated success of learning goals at the time learning is initiated and mediated between context (control) and cognition (responsibility) during the learning process” (p. 26). Thus, motivation plays an important function in initiating and maintaining effort toward learning in cyberspace. As someone coming from an affective and relational culture, I depended on extrinsic motivation, fueled by outside rewards. In cyberspace, I had to rely on intrinsic motivation to overcome the fact that the emotional dimension of a message (humor, disagreement, and the like) could be lost or misinterpreted without verbal and visual cues, body language, or intonation (Conceição-Runlee and Reilly, 1999).

Self-Directed Learning. I recognize self-directed learning as a central concept in cyberspace. I first believed that being a learner in cyberspace involved loneliness and detachment because of the individualized nature of working in front of a computer. However, with time, my experience as an
online learner revealed that there is no time to feel lonely or detached unless I lacked motivation to participate in the interaction or self-direction to complete an assignment.

According to Garrison (1997), self-directed learning is defined as “an approach where learners are motivated to assume personal responsibility and collaborative control of the cognitive (self-monitoring) and contextual (self-management) processes in constructing and confirming meaningful and worthwhile outcomes” (p. 18). Depending on the structure of the course management tool, the navigational design of the course, and the assignments developed by the instructor, I was able to make decisions (self-monitoring) about what to learn, how to learn it, and when to learn it. This meant I was responsible for the internal cognitive and motivational aspects of my own learning. I was free to navigate through the online course environment with autonomy. In other words, the online learning activity emphasized cognitive freedom and promoted learning how to learn (Garrison, 1997).

In addition to self-monitoring, self-directed learning entails self-management of learning resources and support. Garrison (1997) states that self-management “involves shaping the contextual conditions in the performance of goal-directed actions” (p. 23). In my experience as a learner, I was able to manage control of activities in using learning materials within the online environment. Furthermore, self-management increased my control over my learning, which in turn meant increased responsibility. From my own observation as a learner, control over and responsibility for my learning were essential to the success of my performance in cyberspace. These skills helped me become task-oriented once I understood the design (organization and structure) of the text-based environment.

Transformational Learning. The third concept related to the individual learner is transformational learning. I considered my experience as a learner in cyberspace a transformational one. Before my cyberspace experience, the meaning of learning was for me based on a traditional classroom setting with participants of the teaching and learning process present in the same room. Learning online involved adapting to a new way of learning and making meaning of the new experience through critical self-reflection and social interaction.

Mezirow (1998) writes that critical self-reflection of assumptions means “a premise upon which the learner has defined a problem” (p. 186). In my case, I had previously assumed that for learning to occur it was supposed to take place in an environment where learners and instructor would see each other. Cyberspace learning, then, was an issue for me initially since learners and instructors were physically absent.

My first online class focused on the adult independent learner. The course involved general course interactions, online discussion with group members, a group project, and a reflective paper. My classmates and I were constantly reflecting on the meaning of online learning, the advantages and limitations of cyberspace, and the experiences we were gaining or missing.
because of the lack of physical presence. The social interactions with my classmates in cyberspace were part of our reflective conversation.

Clark (1993) believes that “transformation is about change, so transformational learning must be related to learning that produces change” (p. 47). For me, the online learning process involved a perspective transformation, a response to an imposed disorienting dilemma (Mezirow, 1990) evoked by the new mode of learning. Mezirow defines disorienting dilemma as a life crisis or major life event transition. Learning online became a trigger event in my life, involving sitting in front of my computer interacting with people unseen, writing in a language somewhat unnatural to me, and interpreting message and meaning without the benefit of facial expressions or vocal tone. I then engaged in the process of critical self-reflection and evaluation of assumptions about my own learning style. Through this process, I realized that learning online involved a change in beliefs and values about instruction, which resulted in a perspective transformation in my view of what teaching and learning meant in the new environment. Since part of my self-reflection involved engaging in “reflective discourse” with my classmates, I was living the new perspective just by being an online learner (Baumgartner, 2001).

Functioning in cyberspace required that I understand and interpret the online environment in order to perform the appropriate learning task through instrumental learning, which Mezirow (1990) defines as “the process of learning to control and manipulate the environment or other people” (p. 8). At the same time, I needed to develop communicative learning skills, or the ability to understand the values; ideals; feelings; moral decisions; and such concepts as freedom, justice, love, labor, autonomy, commitment, and democracy, which others communicate (Mezirow, 1990). In turn, I honed these skills through critical self-reflection, affirming Mezirow’s transformation theory of adult learning (1990) as requiring a process of reflection, reassessment, and interpretation of assumptions on which we base our beliefs. Learning online was therefore a complex process. I was learning by doing, interacting with others, and constantly self-reflecting on (and making meaning of) my experiences in cyberspace, while reassessing my own orientation to learning in general.

My experience as an online learner was also powerful, in that it changed how I saw myself as an adult learner and educator. It became the lens through which I focused my studies and practice as a trainer/consultant on online teaching and learning after being an online learner. Moreover, my experience was part of a transformational learning process that was not an independent act but an interdependent relationship with my classmates (Baumgartner, 2001).

My Contextual Approach to Learning in Cyberspace

According to Caffarella and Merriam (2000), the contextual perspective of adult learning is grounded in a sociocultural framework. This means that “learning cannot be separated from the context in which the learning takes
place” (p. 59). Therefore, a contextual approach to learning is based on interactive (learning as a product of the individual interacting with the context) and structural (the influence on learning of such social and cultural aspects as race, class, gender, ethnicity, and power and oppression) dimensions (Caffarella and Merriam, 2000).

**Interactive Dimension.** Situated cognition and reflective practice are two examples of learning that encompasses the interactive contextual framework. In the adult education literature, Hansman and Wilson (1998) define situated cognition as “a relationship between the individual and the social or physical situation in which he or she learns. Knowing, from a situated cognition perspective, is not just an independent internal mental process, but is fundamentally situated as a product of activity, context, and culture.” Caffarella and Merriam (2000) suggest that situated cognition can be integrated into the learning process by using a highly sophisticated simulation of real-life activities and events.

Moreover, reflective practice allows learners “to make judgments in complex and murky situations, judgments based on experience and prior knowledge” (Caffarella and Merriam, 2000, p. 60). Reflection-in-action is used to facilitate the interactive reflective mode because it helps learners complete a task through a process that allows them to reshape what they are working on, while they are working on it (Schön, 1987).

Both situated cognition and reflective practice were suitable approaches for my learning in cyberspace. When instructional strategies focused on situated cognition, as an online learner I was often sharing my cultural background with classmates during the online discussion of a topic. For me, this was a way to make sense of my own experience through clarifying it for others. I was interpreting new concepts through culture-specific conceptual frameworks of meaning (Jacobson, 1996). My classmates were also learning about my culture from a situated perspective from my writings.

In cyberspace, I recognize that the instructional design of the online environment (the graphical user interface of the course management tool) has a great influence on the interactive dimension of learning. The instructional design of a course is based on the instructional strategies (activities the learner will perform during the duration of a course), human interactions (exchanges between instructor and learner, learner and learner, learner and guest participant), nonhuman interactions (exchanges between learner and content, learner and tools, and so forth), and evaluation (instructor feedback and strategies for individual assessment of tasks and self-evaluation). This means the opportunity to gain knowledge and interact with other learners is dependent on the design of the online course. A course that offers a space for interaction with other participants, critical reflection of assumptions, and analysis and interpretation of concepts allows me to validate my beliefs, intentions, values, and feelings.

**Structural Dimension.** Social and cultural factors such as gender and national origin had an impact on the outcome of my learning experience in cyberspace. As a woman raised in a conservative society, I found that the
online environment gave me the sense of a safe place for intellectual growth through psychological and interpersonal support while I was going through significant changes in my worldview (Burge, 1998). My perceptions of behavioral norms of a woman in Brazil included being a listener and nurturer, rather than a critical thinker. By contrast, living in the United States, experiencing a more female-empowered environment, hearing the stories of other women, and sharing my own stories all helped me to critically reflect on my assumptions about gender and gave me a new perspective on what it meant to be a woman in society. Expressing my ideas about gender issues and reflecting on my perspective in an environment free of face-to-face encounters were an emancipatory act.

Being born and raised in a conservative area of Latin America, I held assumptions about learning that were characterized by a teacher-centered approach with the design of instruction controlled by the instructor and learner performance influenced by the consent of the authority figure. My participation in adult education courses, and particularly online instruction, challenged this view. In cyberspace, the online learning design and implementation focused on a learner-centered approach, which prevented reinforcement of the instructor power position and affirmed and used the cultural experiences and knowledge of all class members.

What is more important, having the opportunity to facilitate online discussions and moderate chats helped me build my self-confidence and leadership skills. Participation through the written word as opposed to the spoken word improved my ability to perform tasks and roles relative to those of my classmates as well. I felt I had a voice that was recognized and validated when others made comments reflecting on my postings.

Cyberspace was an appropriate environment for me to positively experience the process of acculturation within the culture of America’s higher education. I was open for change, and the environment allowed me to express ideas and reflect on assumptions in a way that was safe. The new learning experience challenged my way of thinking and helped me develop new learning skills. Being challenged, I broadened my repertoire of learning styles, which prepared me to function in today’s society. My experiences as an online learner demonstrated that the individual and contextual perspectives are interconnected. Linking these two perspectives in exploring the learning experiences helped me gain a better understanding of the multitude of contexts that have shaped and continue to shape my learning as an adult and my practice as an adult educator.

Implications of Learning and Teaching in the Context of Cyberspace

In this chapter, I have used the individual and contextual perspectives addressed in the adult education literature to guide exploration and sharing of my experiences as an adult learner in cyberspace. These experiences can serve to make us more aware of what it means for an individual to learn
in cyberspace and how context can shape the learner and learning transactions (Caffarella and Merriam, 2000). The accounts of my online experiences are not to be overgeneralized, however. Rather, together with other experiences presented in this volume, they may yield insights into the influence of sociocultural factors on individual and group learning.

Learning online brings new challenges and suggests new ways of thinking about adult education practice. It is my belief that as adult educators, we need to look at each learning situation carefully because learners represent a variety of backgrounds, gender experiences, and learning styles. Therefore, it is important to consider differences across diverse groups of learners in designing and delivering online courses effectively. One must also consider the increased number of ethnic minority groups in the United States as having an additional impact in the educational system (Sanchez and Gunawardena, 1998). Accommodating more ethnic minority members as learners might well prepare us for using the Internet to reach an even more diverse learner population successfully.

Social and culturally relevant adult education in cyberspace requires self-awareness and knowledge of the learner’s background, interests, and level of experience. Instructional strategies such as sharing biographical information and stories, experiential learning and reflection, journaling, asynchronous and synchronous discussion, collaborating on course assignments, problem solving, critical thinking, and analyzing and evaluating information can help educators design an environment that can meet the needs of diverse learners in cyberspace (Hanna, Glowacki-Dudka, and Conceição-Runlee, 2000).

Awareness of the way diverse learners communicate, behave, and think can help the adult educator develop a course more effectively. Being aware of learning styles and how the context can shape the learner and the learning transactions has major implications for course design and learner support. Giving learners a variety of instructional activities and resources using online technologies can allow them to succeed in a way that may challenge and help them expand their learning style to better function in a diverse society.

References


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