

***Breaking Down the Digital Walls: Learning to Teach in a Post-Modem World***

By R. W. Burniske and Lowell Monke, Albany, NY: SUNY Press (2001), xii + 284 pp.

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R. W. Burniske and Lowell Monke have written a book about education and technology that requires a patient reader, one who is willing to reflect on issues without demanding resolution. This suggestion for a target audience originates from the authors in the beginning of their book on learning to teach in a “post-modem” world. The recommendation is useful, though, in preparing readers for the authors’ use of *dialectical discourse*. Drawing on Freire (1997), the authors define dialectical discourse as “a continual interdependent cycle of communication, critical thinking, and insight growing toward the light of truth” (p. 226). They highlight this type of interaction, as it is their main educational goal for past and future telecollaborative projects—to get students to emotionally engage in open-ended inquiry while being sufficiently detached to reason and accept ambiguity and tension.

Following their interest in this methodology, rather than writing a book about technology integration “techniques” (p. 206), the authors ask difficult questions about education and technology by “representing things as they’ve found them, not as they’ve wished them to be” (p. 9). These thought-provoking questions spring from arguments that arose in face-to-face and telecollaborative efforts, and those past conversations are rehashed for the reader in this book. The text becomes alive as we join the authors in a dialectical journey towards truths about technology integration and specifically about the outcomes of various telecollaborative projects. (The style of the writing even becomes dialectic, with each author presenting one chapter at a time.)

The authors describe this writing effort as an attempt to understand and explain “how to design *and* coordinate a global telecollaborative project to inspire dialectical discourse” (p. 116; italics original). Thus, the book *is* about technology. Along with telecollaboration, readers will join the authors in addressing the digital divide, the push for technology integration, technological globalization, resistance from integration participants, and understanding the medium versus the message. The reader should be aware, however, that at the heart of this book is really a complicated dialogue about the current state of education. That is, the authors use the text to explore standardized test scores, responsibility and ethics in curriculum integration, constructivism, instructional design, and warnings about the standardization of the curriculum. This is not to suggest that technology researchers and innovators will be frustrated with this book. On the contrary, the authors do a careful and appropriate job of addressing technology through education and education through technology. Moreover, teachers and faculty interested in integrating telecollaborative projects will find this text useful as it very specifically describes a number of integration efforts in great detail. However, the reader should be

prepared to enter a dialogue about important issues that run much deeper than setting up e-mail buddies between two countries.

With those thoughts in mind, perhaps the best way to address the potential impact of this text is to understand the meaning of the title, *Breaking Down the Digital Walls*. If we “broke down the digital walls,” the authors suggest four things we would find that provide insight into telecollaboration, education, and technology integration.

1. *Behind the digital walls are various educational possibilities for telecollaboration.* At the most basic level, this book is about using telecollaborative methods for educational goals. R. W. Burniske and Lowell Monke met in 1987 while they were colleagues at an international school in Ecuador. What began as simple conversation because they were at the same place at the same time, turned into complex discourse on various educational topics. After they left their teaching positions, they continued to discuss and collaborate via technology for the next 14 years. This text follows two educators (the authors) as they used e-mail, listservs, and other Internet resources to engage students and each other in open-minded inquiry. Burniske, an English and history teacher, and Monke, a computer teacher, used electronic communication to find “indispensable opposition” (p. 4).

Along the way, however, they found problems. They found mixed blessings with technology, and problems that ranged from technical issues to errors in human communication (p. 64). And, each new solution also became a problem. Electronic publishing was seen as one solution, until Burniske and Monke questioned how to get students to become reflective when there was so much text to digest (p. 47). At its very worst, the authors actually witnessed many anti-dialogical effects (p. 118).

As the authors demonstrate, working with an educational technology innovation such as telecollaboration is not always easy. However, this writing leaves us with evidence that it is possible. Many new innovators tend to problematize integration to such a degree that they never actually attempt the implementation. Burniske and Monke use this text to intimately describe their own problems. However, they also provide explicit detail of multiple projects to help potential innovators realize that technology implementation is a *possible* and fruitful journey. Specifically, they argue that with the teacher as a gardener (planting seeds, cultivating, hoeing the rows, irrigating, surveying the field, weeding, and harvesting), telecollaboration can produce exciting cognitive and affective outcomes (pp. 92, 125-128).

2. *Behind the digital walls is pedagogy.* While reading this text, I was reminded of the “great debate” on media and its influences on learning (Clark, 1983; Clark, 1994; Kozma, 1991; Kozma, 1994). One side of the debate suggests that what really matters in technology use is the pedagogy and instructional design that drive the implementation. *Breaking Down the Digital Walls* reinforces the notion that pedagogy matters. If we break down the digital walls, we find—or at least should find—an instructional design behind the technology implementation.

For Burniske and Monke, the pedagogical goal was to create a project that would allow students to learn from one another through dialogic interactions. In creating this technology-based experience, they drew on various taxonomies to delineate between telecomputing and telecollaboration. The authors defined telecomputing as a collection of networked computers. Many new innovators assume that if you provide this network, learning will occur. Telecollaboration, conversely, describes a pedagogically-sound

learning scenario with genuine interaction between participants. Rather than just having a network of computers, or even simply having interpersonal exchanges or information collection, the authors aimed at providing problem-solving projects that would facilitate genuine interaction with students “reading” one another. In doing so, over the course of time, multiple technologies served the initial pedagogical purpose. Technology use that started out as e-mail later turned into listserv and eventually Web site interaction.

In this second definition of what it means to break down the digital walls, we discover a book about the importance of letting pedagogy drive technology use. This point is crucial because, as the authors suggest, creators of telecollaborative projects must find ways to work within the preexisting curricula (p. 33). In many cases, the curriculum is out of their control. Thus, they ask readers to think of technology integration, and specifically telecollaborative innovations in the same manner one would think about driving an automobile (pp. 100-101). We need to ask where we are going, who the passengers are, and what type of vehicle we will be using. This metaphor gets us out of the “technology is a hammer and everything is a nail” problem, and asks us to question our goals as educators. If we learned in the first definition that telecollaboration is possible, the authors use the second definition to remind us that any technology innovation (including telecollaboration) demands that we define what we are making possible.

3. *Behind the digital walls is the idea that technology matters.* Although the authors only briefly touched on this, they suggest that to break down the digital walls means to see each individual technology for what it offers and how it impacts, enhances, and constrains the pedagogy driving its use.

In other words, the “vehicle” we use to get us to our destination has the potential of making a large impact on our enjoyment of the ride and even our final destination. The authors suggest that the “final goal is at least partly determined by the means used to get there” (p. 226). This is important because of the push to justify the expansion of technology into our schools. Researchers and educators are crying out for research to demonstrate cognitive growth and measurable outcomes. The authors attempt to answer this call by asking two important questions: (a) How can one prove that students learned from each other? and (b) Did the use of the Internet provide unique learning opportunities that participants couldn’t have had otherwise? (p. 181) However, as the authors point out, it was

impossible to evaluate the learning that took place. Perhaps if it had remained a strictly intellectual endeavor some kind of test could have been given to determine how much knowledge had been consumed . . . . It can only be recognized by those who . . . find meaning in it for their own lives . . . . With all the push toward standardization and “measurable outcomes” it was eye-opening to witness, and experience for ourselves, this type of learning that reaches us through our hearts. Such a powerful educational experience is only diminished and degraded by efforts to measure it. (p. 82)

Although this creates a dichotomy for the authors—needing to evaluate the outcome and not wanting to diminish the experience with measurement—they appreciate this problem and start to ask important questions leading to its potential resolution. They

understand that it is part of the responsibility that we have as innovators (pp. 218-228) and one of the issues we can begin to explore behind the digital walls.

4. *Behind the digital walls are neighbors.* In the first potential definition, the most basic level of breaking down the digital walls was necessary to understand what made telecollaboration possible. Successful telecollaboration means communication between others, though. Thus, breaking down the digital walls *could* mean opening yourself up to new neighbors, and consequently new viewpoints and perspectives (p. 143). Breaking down the digital walls for the authors means telecomputing makes communication possible, but we need more thoughtful perspectives and analyses to understand what to do when the walls are down. In other words, digital networks are neither good nor bad in and of themselves. They have the potential to build walls between us, or they can bring us together in accepting multiple narratives. It is our lot and responsibility to understand what to do when we have access to places that borders and time separated us from.

The authors describe this problem by suggesting that we need to recall the ecological character of technologies. In doing so,

we shouldn't be surprised that this overcoming of physical barriers is accompanied by the erection of other psychological ones, and it is the psychological fences that ultimately must be torn down to achieve tolerance for cultural differences. (p. 140)

### **Learning to Teach in a Post-Modem World**

Burniske and Monke, as promised, leave us with more questions than answers. For instance, they attribute much of their success to what I would label as students "mucking around." How do we help students and teachers muck around, especially due to the lack of professional development for teachers? Burniske and Monke claim that mucking around and getting used to the medium even enabled them to write this book. But, they had known each other for a year in face-to-face interactions before interacting online (p. 233). What do we do with students who have not met each other? How do we help them see the need for dialectical discourse? How do we know if their discourse is really dialectical? If we integrate these projects, will this become "old news" to them and will other non-technology-based courses become extremely boring?

Joining the dialogue (reading the book) provides insight into some of these questions, but perhaps the best place for analysis starts with the title of their book, *Breaking Down the Digital Walls*. I have suggested that by trying to understand their choice of a title, we gain knowledge specifically about the implementation of telecollaboration and more globally, the current state of education. They have provided text to argue that telecollaboration is fruitful and possible, but it requires a pedagogy and integration into an existing curriculum. Moreover, it is one that takes time and effort. As important, however, is the notion that behind the digital walls are technologies that may have qualities that constrain or enable certain pedagogical goals and beliefs.

Thus, just as they have used dialectical discourse in their projects and even in the style of this book, they have provided a model of technology integration as discourse. In this discourse, the pedagogy drives the technology, and the technology impacts the curriculum. It becomes a recursive process that, much like dialectic discourse, emits

growth, not end points. They argue, “while it’s essential that we began with a clear purpose, we must also allow for the adaptations and idiosyncrasies that breathe life into an otherwise sterile design, giving the project a unique personality” (p. 116).

In any case, if the notions listed above define successful use of telecollaboration (attention to pedagogy and technological qualities), then we are still left with understanding what happens when one breaks down the digital walls. The answer, according to this book and its authors, is responsibility. We are left with responsibility for other types of walls that are not as easy to explore, move, or tear down. We are left with responsibility for the development of multicultural awareness and *full* citizenship in the “global village.” Finally, we are left with responsibility for understanding that technology does not fix educational problems. It gives us new ways of looking at them, but we still must get to the heart of the matter. Perhaps that is what Burniske and Monke are suggesting we would find if we broke down the walls—educational problems that have been walled up.

This book is an excellent read for faculty and K-12 teachers who are interested in attempting cross-classroom collaboration, but who are concerned with the potential problems inherent in any technology implementation. This text is also important for instructional technologists and educational technologists as it presents larger issues related to the impact of technology on education. Readers should be prepared to leave the reading with more questions than answers, but with carefully contextualized and appropriate questions as well as data for potential resolution or further studies in their own environment.

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