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More Than Just a Web Site: Representing Teacher Research through Digital Portfolios

The authors have made digital portfolios and blogging the centerpieces of their teacher-research group as ways to share their research and get input from their peers. The group discusses the many benefits this collaborative project has offered their teaching.

As teacher-researchers fresh from our experiences in a National Writing Project (NWP) Summer Institute, we have explored the intersection of technology and teaching in a unique manner—through digital portfolios. Funded by a Teacher Inquiry Communities Grant from NWP, we have participated in the Digital Portfolios as a Space for Inquiry teacher-research group at our site, the Red Cedar Writing Project (RCWP) at Michigan State University. When Troy, our group facilitator, developed the original grant proposal, he wanted to invite teachers into a collaborative project looking at how digital portfolios could move beyond being standards-based multimedia documents—as described by some scholars (Barrett; Bartlett; Costantino and De Lorenzo)—and into documents framed around professional interests, visual rhetoric (Kimball 25–37), and themes or questions (Kilbane and Milman 46–48). How might a community of teacher-researchers integrate the technology of digital portfolios into their inquiry process? Moreover, how would that specific use of technology affect the process and potentially influence these teachers, personally and pedagogically?

Two frameworks have guided our examination of these questions. First, Marian M. Mohr et al. offer a definition of teacher research as "inquiry that is *intentional, systematic, public, voluntary, ethical,* and *contextual*" (23; italics in original) that we find foundational for our work. Teachers who research their practice begin with a specific question about their teaching and students, collect data that can answer it, and then present that work to a wider audience

in an appropriate manner. Thus, we each formed our own question that would be explored over the course of the project.

Second, we utilized the concept of "multiliteracies pedagogy" (Cope and Kalantzis) to scaffold our learning about technology. We began "situated" learning about digital portfolio construction and thought about the visual rhetoric of our portfolios by reading Miles A. Kimball's *The Web Portfolio Guide: Creating Electronic Portfolios for the Web* and Lynell Burmark's *Visual Literacy: Learn to See, See to Learn.* Next, we "critically framed" our portfolios around our inquiry questions. Finally, as the discussion below demonstrates, we have "transformed practice" by applying what we learned—from our inquiry and what we know about building digital portfolios—to our own professional development and teaching.

While we have met monthly throughout the school year, much of our work has taken place online through email, blogging and, of course, our digital portfolios. Thus, we felt that our article could take the form of an "online-conversation-as-article" as used in a previous issue of *English Journal* (Hogue et al.) to show the power of what our site director, Janet Swenson, has described as "transformative teacher networks." We will briefly introduce ourselves with links to our digital portfolios, or, as we have begun calling them, our DPs:

> Troy, outreach coordinator for RCWP (http://www.msu.edu/user/hickstro/)

> Anne, English teacher at a suburban high school (http://www.msu.edu/user/jacobyan/)

> Aram, eighth-grade language arts teacher at a suburban middle school (http://www.msu.edu/user/kabodian/)

> Becky L., English teacher at a suburban high school (http://www.msu.edu/user/luftrebe/)

> Becky S., second-grade teacher at an urban elementary school (http://www.msu.edu/user/stephe80/)

> Cathy, kindergarten teacher at a rural elementary school (http://www.geocities.com/xokindygarden/index.html)

> Nicole, sixth- and seventh-grade language arts teacher at a suburban middle school (http://www.msu.edu/user/lergnico/)

> Tara, fifth-grade teacher at a suburban elementary school (http://www.msu.edu/user/autreyta/)

Here, we invite you into a condensed version of our blogging that illustrates the many nuances and complications of creating and maintaining a digital portfolio while also highlighting the joys and frustrations of teacher research.[1]

"Just One Click": Connection and Collegiality in Online Spaces

Troy: Bill Cope and Mary Kalantzis make the point that learning multiliteracies becomes more natural when people work on something of personal value. Mohr et al. and Swenson show how communities of teachers working together can foster professional learning. So, I am interested in hearing how you perceive our work on DPs fitting in with your learning about technology and teacher research.

Anne: Well, because I collaborate comfortably with this group, I don't feel I have to be a techno-expert on everything I say and do. I can admit to being a "moron" about various computer skills and know that Tara or Becky S. will either help me or be in the same situation! I truly enjoy our time together, which—no matter how awful my day went in the classroom—allows me to decompress and get working on my project.

Aram: This group offers validation for my teaching, a nurturing growth in my professional experience.

> Since we are working on similar projects, you all encourage me to try new ideas, stretch my capabilities, and even commiserate with me when necessary.

It has taken me in some directions I didn't think were there; I feel free to revise my research in directions I might not be able to take in places where professional development is scripted for me.

Tara: I am the kind of person who probably never would have performed solo on stage or taken up a research question to study on my own. However, give me a group and I will flourish. Although I have worked with my colleagues at school on various mandated projects, this experience is different because it is quite intentional; we chose this inquiry group and "research questions that matter" to us (Mohr et al. 23).

Becky S.: Participating in this project has presented the perfect opportunity to model a concept of professional development as teacher-driven research. We ask specific questions about our classrooms and technology use, thinking about how technology influences our teaching. Then we present the results meaningfully through the DP. As teacher-researchers, we drive our multiliteracy learning out of necessity as we learn the ins and outs of Web design.

Nicole: This idea of using technology connects to the blog, too; we are able to access each other's sites with just one click. This feature helps us remain immediately connected to each other's work and has been a motivating and guiding factor for me many times.

For instance, once I blogged about narrowing my research question from the effect of a teacher as writer to sharing student poems, I immediately heard back from Tara, who loved the idea of using The Weekly Poem in class (visit http://www.msu.edu/user/lergnico/sixth.html for a description of this assignment). She had been using something similar and suggested that I take a peek at her DP to see if what she had been doing might work for me (visit http://www.msu.edu/user/autreyta/poems.html). In the click of a button, I was looking at Tara's superbly constructed DP and had numerous ideas on how I might like to lay out The Weekly Poem portion of my site. I had been struggling with posting student artifacts because I felt overwhelmed and as if I had been lacking focus. Yet, by looking at Tara's format, I realized that something like that was exactly what would help my site remain visually and structurally appealing, while simultaneously empowering me to alter my DP to meet my needs as a teacher (visit http://www.msu.edu/user/lergnico/1sthr.html for one example).

Cathy: I agree with Nicole—the heart of our group is indeed the blogging. It has been so rewarding to

get to know each other through these thoughtful interchanges. Like Aram, I feel that our many voices in conversation on the blog have opened avenues of ideas that I may not have considered as we journey through this inquiry process together. Since we are working on similar projects, you all encourage me to try new ideas, stretch my capabilities, and even commiserate with me when necessary. This gives me confidence to continue when the task seems daunting.

"Blasting the Hinges Off My Door": Accountability and Portfolios in Public Space

Troy: So, collegial support for creating and posting a DP is helpful; it encourages you to "critically frame" your work. But, how do you represent it? Mohr et al.'s idea about teachers being ethical, for instance, in that we describe and share both successes and failures (25), is incredibly important to me. So far, everything that I have read about DPs for reflection and assessment makes them out to be cool techno-tools, showing only the best work, connected to standards.

But, I hear you saying that DPs are more than this, right? You each are bringing up real frustrations and concerns about how, why, and when we should use DPs that I don't think have been addressed before. Going public makes this all real. Can you talk about that?

Aram: One aspect is how I think about audience as I post information to my school and professional Web sites (visit http://www.msu.edu/user/kabodian/ for the professional site and then click on "My MacDonald Site" for the school site). It sounds as if I have a dual personality—two Web sites, one person. I struggle with what information should go on which site, who I think may read the information, and how best to present it. How honest am I up there? For students' work, how much do I put up there? Do I put up rough drafts? Where is the line? How does it reflect on their current and previous teachers?

Tara: Yes, by revealing what my students are accomplishing as a community of writers, I am feeling a pressure to make sure that I show all of my "bosses"—parents and administrators—that I am dotting all of my content-standard *i*'s and crossing all of my curriculum-map *t*'s. Granted, I am expected to do so anyway. Perhaps I am overstating the obvious, but in that "shift from a private perspective to a more open, public perspective" (Mohr

et al. 24), I am making myself highly accountable to the curricular goals of my school district. Displaying students' writing through the DP is like blasting the hinges off my door during writers workshop and inviting the world to come in and see the raw insides of a vulnerable practice.

Becky S.: If you back up from it, though, there is an opportunity here with DPs to be what I might call the "reality show of education." We show what *we* want about our classrooms, rather than having someone else frame that vision for us. This seems like an opportunity to have a grassroots change for education—not a political solution, but something to influence a larger, broader audience. We, as teachers, have to show what we want to have seen of our classrooms, and DPs seem like a good way to get the message out.

Nicole: Knowing that anyone can get a glimpse into my classroom through visiting my DP forces me to think critically before publishing student artifacts—sharing student voices requires careful planning. Each time I alter my DP, I must decide which pieces work to represent students in the best possible light. I want the site to be something that all of us feel invested in, yet I want us to be comfortable with what is represented there.

Becky L.: Beyond just posting, what about the research itself? Students are a teacher's primary responsibility. Therefore, teacher-researchers must accept and act on that responsibility. What I struggle with is when I try something new in my classroom as a part of my research and it fails. What happens when I have spent time planning new lessons, working with students, forming certain expectations of what would happen and, as the end result, my research proves to be "disconfirming" (Mohr et al. 25)? Now how do I make up that time that I have taken from my students? Is this an ethical approach to learning about technology and teaching? Or, is our time better spent doing what we know works?

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Anne: I agree with you, Becky, that the ethics of this are important. Something similar is happening in my classroom. As much as RCWP reignited my passion for the pen, it seemed by second term that my students and I were buried in ink, trying to build their

own digital writing portfolios. It was writing overkill, spawning student whining and loads of grading instead of enjoyable composing moments.

Yet, working on my DP was what redeemed me. It has affirmed Mohr et al.'s assertion that teacher research is and should be contextual (25)—to inform my current teaching practice and *not* to simply fulfill professional development requirements or college coursework. Our discussions about the ethics of posting student photos, feeling apprehensive about sharing students' rough drafts, and even choosing typeface and background colors are the "gems" that will resurface in my classroom in the context of their digital writing portfolios (visit http://www.msu.edu/user/jacobyan/ to view students' digital portfolios). The advantage of this research is that we are encouraged to see these gems in our failures, learn from them, and readjust our thinking and teaching.

Becky S.: As I mentioned before, by exposing ourselves so openly, though, we may also be unleashing the most powerful instrument for change in education. Rather than using traditional measures, we can show growth and celebrate student achievement in many ways with DPs so that parents may then become our most informed and supportive advocates for change.

"Look How Far *We've* Come": Toward Transformed Teaching Practice

Troy: I get the sense that working in this group—with this situated focus on the DP to share your classroom research—has affected your inquiry and teaching, transforming practice. What is it about working in this group, with DPs, that motivates you? How has it changed you?

Tara: Whereas I have been willing to incorporate music, art, movement, and other nontraditional modes of learning into my classroom, technology has almost always been ignored. Until recently, I have been frightened by technology, feeling like my knowledge base was not stable enough to guide students. In addition, our antiquated computer lab had become a daunting place where a neon "enter at your own risk" sign seemed to flash each time I entertained the thought of taking students there. Now, however, not only does my DP make using the lab with students necessary but I also have a better understanding of how to access information online and create presentations. Because of this, I am not as fearful about using technology, despite my school's troubled lab.

Becky L.: Just to add support for your experience, Tara, I would like to go back to the first time I saw your DP. I remember how concerned you were during our first face-to-face meeting about your technological skills and the ability to realize your DP's vision. But then the day came where I decided to take a look at everyone's DPs and I was completely amazed by the awesome things going on in your classroom and on your DP. This was the moment when I think I realized that the group collaboration—both in digital spaces and in person—matters. Who would have thought that this could have come from a teacher who claimed that there was an "enter at your own risk" sign over her computer lab? Yet, knowing you, working with you, and hearing you talk about this experience lets me know that I, too, can do this.

Becky S.: Learning how to use technology and how to implement its use in the classroom are separate and equally daunting tasks. My seven-year-old students, when given a highly engaging tool, will become absorbed in the process of exploration. They will push every button, test every function, and do it all again until they have run out of options, exhausted the batteries, or it's time for recess. It would be a welcome transformation for many teachers to have this fearlessness when it comes to technology. There comes a point when you just have to jump in with both feet, like a seven-year-old, and that's where the exploration begins.

Students have taught me that you don't need a complete understanding of the how's and why's of technology to tap into its power. Six months, fifty-eight pages, twenty-four photos, thirty-six artifacts, and two hundred links later, my DP is not complete but is certainly more complex and, more importantly, serving many functions. As the need for different elements within my DP has arisen, new learning has taken place. This is the kind of learning that sticks with you because you went through a great deal to get it right, and there were some sacrifices along the way.

Becky L.: Let me respond to a couple of your thoughts. Coming into this project, I thought that I was pretty knowledgeable about computers. I created a Web site for my original RCWP portfolio, so I was pretty confident that I could do it for this inquiry project, too. However, I am the seven-year-old you talk about. I tend to dive into projects, get ahead of myself, and then backtrack in the end. While I was feeling pretty confident in my abilities to pick up on the technological skills it would take

to actually create my DP, my worries were focused on the opposite end of the project. I wasn't sure what my inquiry would be and I was having difficulty creating my vision for that. I wasn't concerned with learning the skills to actually put it together.

Even though I feel like my focus wasn't completely clear, the more I read about technology and computers being used in the classroom—and after visiting everyone's DP—I am growing more confident with my inquiry project of creating a Web quest and implementing it in my teaching.

Tara: There are other aspects to building a DP and teaching, too. Shortly after reading Burmark's *Visual Literacy,* I went back to my DP to make major changes that would be student-friendly. I yanked the dark, drab orange and green background colors and implemented a calming blue and happy, pale yellow. I also changed the majority of my text, made sure that my headings and titles were all composed of one font, replaced my original clip art with a more jovial-looking tiger, and began sifting through class photographs in search of appropriate images to add. I decided that my portfolio's audience would feel more willing to journey through what would mainly be text-based student documents if they were greeted by an approachable tiger and could constantly see the "real" faces of the texts' authors (visit http://www .msu.edu/user/autreyta/writers.html).

Nicole: Wow, Tara, I completely commend you—your hard work on this project is totally paying off. I had chills as I looked through your site—it's astonishing to see how far you have come since our first frustrating day together. Look how far *we've* come and what we can continue to contribute to each other! But, with your genius comes responsibility. I might need a little more counseling on how to organize my site still beyond this Weekly Poem. I know that my DP has changed for the better because of your example.

Anne: Things change outside the DP, too. Using more technology in the classroom opens the door for so much more. It transcends "movie days" and overhead slides, what technology in the classroom *used* to be defined as. When integrated thoughtfully, a DP can really reshape the learning habits of students such as Becky's seven-year-olds—those who enjoy learning in a different mode. As Nicole writes and posts Weekly Poems on her DP, it's clear this has sparked an even more motivating environment in her classroom and given her a chance to don the teacher-as-writer hat, which we all desire.

Cathy: I agree. At first it seemed intimidating to incorporate technology into my kindergarten classroom, but I have tried several ideas from the group. From a conversation we had, I developed a PowerPoint presentation with photos of the children in varied points of hanging coats, stowing backpacks in cubbies, making lunch choices, and so forth. Replaying it repeatedly serves as a visual reminder of our morning routine in a genre that speaks to differing learning styles, fosters independence, and helps preserve the teacher's sanity. Including simple text to describe the activities addresses their emerging literacy and encourages reading for a real purpose. When I posted this on my DP, parents could access the presentation, feel connected to our classroom, and reinforce both the morning routine process and the literacy aspects with their child at home (visit http://www.msu.edu/~edingto2/morning %20routine.htm). When a successful technology activity validates my time and effort, it persuades me once again that this is worthwhile.

Anne: Like Cathy, I used technology in the form of a well-structured PowerPoint presentation and it changed things in my classroom, too. I created a slide show of World War II images that morphed my third-hour class from an unfocused group into motivated, thoughtful writers. This is my most difficult class and it's not easy to come up with engaging lessons. Without having seen and discussed the incredible ways our group uses technology, and having shared our reading of *Visual Literacy,* I would never have had the guts or motivation to put together my slide show. Ultimately, I wouldn't have heard from a visitor in my class, "Look at how quiet they are. They're really into this." It just amazed me what a simple slide show can do, and I can't agree more with Becky S., who said, "you don't need a complete understanding of the how's and why's of technology to tap into its power." That's *exactly* what I experienced.

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Cathy: Yes, moving toward "transformed practice," we try new ideas in our classrooms, even if they may not all work as well as expected. By consistently searching for best practices, we evolve as educators. The DP is a tool that can help by capturing and showcasing where we and students are at any given moment. Parents of my kindergarten students

comment that they appreciate being allowed to "look into a window in the classroom" via the DP to see what is happening. To that end, I reevaluate constantly what I present, how it is presented, and how I represent the outcomes.

Becky S: As we integrate teacher learning into our projects and individual DPs, we have completed a cycle of profound learning and shifted our paradigms to include technology as a wholly integrated part of our classrooms. Participating in this group is more than just the normal professional development routine; designing a DP is so much more than just creating a Web site. It requires a presentation of our new knowledge—from our use of technology to our use of research methodology—to encourage collegiality and satisfy our creativity in teaching through technology.

Troy: So, we end this part of the discussion, but not with a conclusion. Instead, we will continue to think collegially about our DPs and how we can encourage others to incorporate technology learning and digital portfolios in their own unique ways through teacher research. Where are we heading next?

Note

1. We have intentionally excluded the blog's URL because it remains password-protected for our group due to the sensitive nature of some postings. This was a choice we made when we began the project and noted how the blog should function as a private space for us to discuss the public nature of our portfolios.

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