

## **Rethinking the Purposes and Processes for Designing Digital Portfolios**

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### **Abstract**

As digital portfolios become more prevalent as a part of technology learning and assessment in teacher education, the purposes and processes for creating them have become contested. Originally meant to be critical and reflective spaces for learning about multimedia and conceived as a process contributing to one's professional growth, research in the field shows how digital portfolios are now increasingly being used to provide evidence that a set of teacher education standards have been met for a course and are then abandoned. In this article, the authors describe how they designed their digital portfolios as part of an inquiry-based, teacher research project and represented their own work – as well as that of their students – in these online spaces. They discuss a number of personal and professional concerns that they encountered while engaged in this process, from the ethics of editing students' work to the online personas the teachers themselves chose to adopt. Issues of audience, purpose, format, and content are framed in discussions of teacher research and portfolio design. Finally, they argue that keeping design-based decisions about how and why to construct a digital portfolio in teachers' hands can contribute to lasting professional growth and change.

## **Rethinking the Purposes and Processes for Designing Digital Portfolios**

What is a digital portfolio, exactly? What are they good for and, most importantly, why do we choose to make them?

We have asked ourselves these questions again and again as a part of a teacher research group at our site of the National Writing Project, Red Cedar Writing Project at Michigan State University. Like Norton-Meier, we believe that the types of writing in a digital portfolio varies and reflects new genres of text aimed at a number of different audiences (2003, p. 517). We also see why digital portfolios are a driving force in teacher education. As Kilbane and Milman note, they:

1. measure authentic assessment related to professional standards; and
2. involve a technology-rich process that benefits teachers personally and professionally (2003, p. 7).

These two trends are important to note because it has been further suggested that a digital portfolio for teachers requires a set of standards. Because “a portfolio without standards is just a multimedia presentation or a fancy electronic resume or a digital scrapbook” (Barrett, 2001, Online), these standards act as a guiding force in the process of creating a digital portfolio.

Within this context of technology learning and professional assessment, we think that other purposes and processes for digital portfolios need to be examined. While we agree with these broad definitions of and purposes for digital portfolios, we want to rethink how teacher education and professional development has come to know and understand what digital portfolios are and how they are used. To do so, we take the angle

of writing teachers and begin by briefly looking at how digital portfolios function as unique rhetorical documents.

First, Yancey and Weiser suggest that digital portfolios have much to say about the changing nature of literacy, “partially as a function of how reflection in the portfolio asks students [and, we argue, teachers] to describe and narrate and analyze their own learning, and partially as a function of the electronic media” (1997, p. 16). Recently, Yancey has gone on to argue that creating a digital portfolio is a distinctive rhetorical situation for writers and, because of this, what “we ask students to do is who we ask them to be” (2004, p. 739). In other words, the opportunity to produce a digital portfolio and share it online creates a distinctly different situation for a teacher than when it is on paper alone. Besides being a different type of composing process — one that includes hypertext and multimedia — putting work online as compared to in a three ring binder positions teachers in front of many different audiences including students, parents, colleagues, administrators, and the general public.

Second, we also agree with Yagelski who makes a clear case for the role of portfolios in learning. He argues that, “[i]n short, the portfolio would be not simply a means to assess growth and reflection but a vehicle for that growth and reflection” (1997, p. 231). If the process of building a portfolio is seen only as an add-on to a course, or as part of an external assessment initiative, then the portfolio writer may only complete the tasks and collect the artifacts as a means to that end. However, if the portfolio construction process is conceived as a way to think critically about one’s learning, reflect on the work that one has done, and examine the ways that technology can be used later in one’s classroom, then that creates a very different experience for a teacher.

Unfortunately, teacher education programs are increasingly turning to digital portfolios as a solution to measuring standards (Strudler & Wetzel, 2005), not as a means for rich, contextual technology learning. For instance, initial interest in creating a digital portfolio may be high in pre-service teachers (Bartlett, 2002; Milman, 2005a; Willis & Davies, 2002), but often fades away as they are unable to find the time to maintain their portfolios once their teaching careers begin (Milman, 2005b). In short, the focus on assessment rather than rich, contextual technology learning and reflection troubles us.

Thus, we see digital portfolios occupying a contested space in teacher education, caught between critical reflection and the many needs of technology learning and professional assessment. Troy, as the project facilitator, wanted to create a teacher research group that could explore these issues further. So, as a part of our rethinking the purposes and processes for designing a digital portfolio, we acknowledged this tension in the beginning and chose to actively explore digital portfolios as a space for 1) learning about technology and 2) to foster inquiry-based professional growth (Autrey *et al.*, 2005). Our digital portfolios started fresh, without a template or particular expectations, literally, by hitting “new” and creating a blank page.

This is not to say that we began with blinders on. Quite the contrary. We began with the principles of teacher research -- inquiry that is *intentional, systematic, public, voluntary, ethical, and contextual* (Mohr, 2004, p. 23, italics in original) — and integrated the New London Group’s “pedagogy of multiliteracies” (Cope, Kalantzis, & New London Group, 2000) as a guiding framework for our project. Rather than all of us beginning with an expectation of building portfolios that would share common characteristics, we talked about the teacher research that we hoped to do in our

classrooms and how, over time, our digital portfolios could represent our own work and students' artifacts in ways that supported our inquiry.

We also wanted to think about our digital portfolios from a multiliteracies perspective, a view that would allow us to think critically about how we were designing our portfolios and learning technology for exigent purposes. Rather than simply trying to complete a pre-set checklist and gather a set number of artifacts, we set ourselves to task from a design-based perspective. In so doing, we were able to set aside the question of what a digital portfolio *should* be — both in terms of form and content — and focus instead on what we *wanted* them to be. Our portfolios became a place for reflection and growth, not just for collecting artifacts and completing a checklist of standards.

It is with this background in mind that we begin our discussion about how the rhetorical and ethical decisions that go into the design of an inquiry-based portfolio have made this experience a valuable one for us as in-service teachers. We believe that keeping portfolio design decisions in our own hands offered unique opportunities and insights that may not have occurred without that level of autonomy. This is not to say that professional standards were eschewed, nor that assessment was not on our minds. Far from it. As we describe our experiences — and what we learned from them — we will show how each of us wrestled with ethical, practical, pedagogical, and technical issues related to designing our portfolios and representing our teaching and students' learning in these contested spaces.

**To edit or not to edit: Anne's experience with the professional dilemma of how to represent student work**

As we began collecting student work and uploading documents to our digital portfolio, many of us voiced concern about how “rough” students’ rough drafts should be and how much refining we teachers should do. Do we want to maintain the reality of how student writing *really* looks — wonderful, but imperfect, after several revisions? Or, because it would be public to the world and displayed on *our* digital portfolios, should we step in and perfect each student piece before the uploading takes place? What were the implications for say, our superintendent, a colleague, or even prospective parents “shopping around” for a school district, each looking at our teacher websites and seeing that published student work may have flaws? Considering that we designed our portfolios in the most organic way possible, many of us wanted our representative student work to also be real.

So, I will share an example of how putting student work on my digital portfolio (<http://www.msu.edu/user/jacobyant/>) in this way has had an impact on my collegial roles and responsibilities. Recently in a departmental meeting, our department chair asked for clarification on a new genre in the revised state standards, claiming she really had no idea what a “multigenre, multimedia work” would look like beyond the typical PowerPoint presentations most of us had woven into our English curriculum. Though I wanted to stand up and shout about all the work I and my student research group had put into my digital portfolio last year, I chose a more modest approach and found myself strangely nervous about what I was about to do. Ultimately, I decided to show my digital portfolio and the multimedia/multigenre student work therein. The pieces were wonderful; I was so proud of what my small, after-school student group had accomplished. The catalyst for

fear was simply acknowledging that, in a few strides to the computer, I was now becoming a technology guru in our department.

I began to click through my students' work. I explained how Allison's hypertext-influenced essay and then Ben's photography-infused poems may be representative of the multigenre standard. I received the typical "ooh" and "ahh" sort of praise I should have known I would get from my wonderful colleagues.

But, then it happened.

All of the fears I initially felt about making my work public came, in one brief moment, to fruition.

"There should be two 'Os' in 'to' right there," stated one of our intern teachers. "Just in case you have to show this in your graduate portfolio."

Of all the blood, sweat, and tears — or in our case, multigenre study, collaborative revision, and learning about visual literacy — I proudly displayed, she focused on a single spelling error my student apparently overlooked in his essay about, ironically, getting perfect grades. I tried to ignore it, but I couldn't help thinking that maybe I should have, despite four or five revisions on each piece, made the student's final draft a *teacher's* final draft. But naturally, in my role as a writing teacher, I was focused more on the process that my students had been involved in to create such dynamic texts, not just the final edits before putting them online.

My story doesn't end on this disappointing note, however. In discussions since the meeting, many of my colleagues have shown interest in creating student work like what they viewed on my digital portfolio. Most chose to look beyond grading the student work displayed and decided that given the time and resources to pursue the teaching of more

digital writing, they would be interested. Yes, a few were overwhelmed. Our department chair sighed, “Ugh. I need to retire!” But instead of reading that comment in a negative light, I interpreted as, “Wow, I could never accomplish something as great, technologically, as that because I don’t have enough time to learn how.” As a teacher in the trenches, I couldn’t agree more, though I hope that I can help her learn.

### **Towards transformed practice: Tara’s ever-evolving digital portfolio**

Over the past two years, my conception of a digital portfolio has changed significantly. I began with no experience creating web pages, and have moved into a place where I couldn’t teach the way I wanted to without one. Once a place for *me* to share students’ work, I now invite them to do the work *themselves*. Let me explain how.

Students’ novice typing skills and antiquated computers originally prevented them from publishing in our school’s computer lab during the creation of my first classroom digital portfolio (<http://www.msu.edu/user/autreya/>). Thus I enlisted parent volunteers to type students’ pieces. However, this practice challenged parents’ typing skills and threatened my perception of how students’ work should be displayed. Typing in the manner that I expected — exactly as the work had been published by the students — was simply too hard. I asked volunteers to perform an uncomfortable function since students’ writing often included misspelled words and incorrect conventions. In addition, neither the parents nor I did a spell check in order to maintain the authenticity of a child’s work. Therefore, some of the parents’ own mistakes were not caught, making students’ work appear less edited.

Thus, I have rebirthed this year's classroom digital portfolio in the form of a blog (<http://room115.thedigitalpaperchase.net>). My school just received new computers, and students are able to go online without the fear of their computers crashing. The blog has solved problems while also challenging my students and me in new ways. I no longer rely on parents to type students' work. I took students to the lab early and often this school year so that they could improve their word processing and keyboarding skills. They are now able to type directly to the blog on their own, and the work that our digital portfolio displays is truly reflective of their skills.

More importantly, the blog contains some characteristics that last year's static, website-based digital portfolio that only I could update did not. For example, the blog allows users to comment on the posts of others. On one hand, this aspect opens academic doors that the last digital portfolio did not. Michigan's language arts curriculum standards, like many other states', assert that students will be able to respond to the work of others. The "comment" option makes it easy to put that standard into practice. I am also able to critically respond to students' work and with this comment tool, making it easier to document my assessment of students' work and give my young writers immediate feedback.

However, this tool has its drawbacks. Technology use is growing everywhere — not just in our classrooms. For naive but worldly fifth grade children, the lines blur between sites like "My Space" that they use to socialize while at home and the classroom blog that is supposed to represent their academic personas. Students and I regularly discuss audience and purpose. To be honest, I am excited to engage them in such meaningful, real-world conversations. However, while students have no problem posting

their cross-curricular writing with thoughtful regard for content and mechanics, they still often tend to forget their audience when they begin offering one another feedback using the comment tool. They often comment with instant message shorthand like “CUL8R” and “LOL.” Also, their punctuation disappears along with their efforts to remember that they are using a school-related public space. The real challenge for me occurs when, as the “moderator” of the blog, I must accept or reject students’ comments. I feel like I am suppressing my students’ opinions when I hit the delete button, and I have never been a fan of censorship. Yet I make these tough choices because I want to represent my students and myself in a way that is in accordance with the curriculum mandated by my school district and the state of Michigan as well as the moral and ethical norms of our community.

That said, creating and using a classroom digital portfolio has been a positive experience for us all. By inviting members of my district and community into this online space, I have contracted myself to regularly submit a digital interpretation of the internal rhythm of my classroom. Sure, this public aspect is intimidating; anyone with knowledge of the curriculum may look at the work we are doing on the blog and know whether I am doing my job as a fifth grade teacher. Yet, I must confess that I thrive on the occasional email sent to me commenting on the digital portfolio by a parent, board member, or other community members. Their words fuel me to constantly reassess my effectiveness as a teacher and thus provide a better education for my students. Similarly, their words cause me to regularly revise the look, feel, and way that the digital portfolio is used. My experience with the digital portfolio has inspired me to successfully begin using technology with students in other areas of my classroom as well. This year I have added

another component to the blog: podcast shows. I have confidently begun learning how to utilize an MP3 player and create and edit a show in Audacity.

The digital portfolio better informs my instruction and assessment than past paper-driven portfolio methods. Now I can easily view a student's writing samples with one click of a button. Because I have laid out pieces in a linear fashion from the earliest to the most recent work, students, their parents, and I are easily able to see progress over time. The digital portfolio also allows me to instantly see whether a particular child is meeting curricular objectives. In addition, I can quickly pull up several students' work and do a collective assessment, noting common errors and successes. This helps me decide whether I have presented the required curriculum and what I need to review or introduce to students.

The digital portfolio has become a vehicle for my growth as much as it has for my students. Neither the digital portfolio nor I remain static. Consider the poem "Don't Think" by Nikki Giovanni in *Quilting the Black-Eyed Pea* (2002, p. 109): "The most important thing/ I know/ about teaching/ is that the teacher is also learning./ Don't think/ you have to know it all." I continuously enrich my knowledge about teaching writing and technology because I know that—just as I remind my students every time we get on the blog—my audience is now greater than the twenty-three students who look to me for guidance each day. They are looking to each other, and to the rest of our community as well.

**Identifying the audience: Becky's thoughts on representation and "filtering" one's online persona**

As I began thinking about my own digital portfolio, my district made it easy for me to post — or not to post — student work. At the time of registration each fall, all students fill out a computer form asking for permission for three things. On that form parents must decide whether or not they will allow their student(s) to be identified on the internet with directory information, a photo, and/or samples of their work.

When I began uploading photos on my digital portfolio (<http://www.msu.edu/user/luftrebe/>), I asked for a list of students that granted the district permission to display his or her picture online. The release form, in the eyes of my high school and district tech department, was all the permission I needed. I could see exactly who was allowed to be published on my website, and who was not. This came in handy as I updated and revised my digital portfolio.

Originally, my digital portfolio was intended to be an outline and guided lesson of two major class projects. However, students were not utilizing it as I had hoped. I then began to publish student work on the site, and as a result, more students frequented it to see how he or she was represented online. I continue to update my site even now, and I have concluded that I will only get full participation from my students when I represent them all in some way online, as my co-writers here struggle to do, too. Then, and only then, will students begin to see my digital portfolio as their own.

Along with these issues related to students, representing myself digitally has been one of the greatest challenges during this development process. How do I show my students, parents, and colleagues who I am as a teacher? How do I tell my story online? When I think about my audience and how they may actively search for (or simply stumble upon) my site it reminds me of Aram and his digital portfolio (described below),

which as we know has multiple audiences and two faces. His website is directly linked to the school webpage, a luxury that currently is unavailable to me in my district. Mine, therefore, is discovered by parents by chance or if their students share the URL with them. In other words, without any real effort on their part, parents would not likely stop by my website. In short, this limited my audience.

But recently, my district had an “aha” moment.

I have been asked to be part of a pilot program to create and maintain a school financed webpage. Like Aram’s school, my district wants to be able to show the board and the community the usefulness of school and classroom websites.

Now, I am re-challenged. I am challenged to make it user friendly, which I think I can do; I am challenged to update it daily, which I hope I can do; and I challenged to make this site a site that parents won’t want to live without. It is up to me and a couple other teachers to set the bar. The catch? I have to use the school’s new website development program, which means starting from scratch, yet within the parameters they set for us. I can do that.

I believe that part of my involvement in this pilot program is to make my website a necessary tool. I have to prove the validity of digital portfolios not only to my colleagues, but my parents and students, too. I could publish student work, I could post homework, I could blog, I could, I could, I could... the possibilities are endless, but my audience and task are both different. What I choose to put on this website is a direct reflection of who I am in the classroom. I have to think about how I want to be represented within my digital audience. After all, we are all learning how personal representation online can impact our professional and personal lives.

So, I ask, why does this matter to students? Well, it is no secret that the use of the internet has exploded within our public schools. Like Tara, I see how “My Space” and online photo albums are hitting the news boards across the state. Recently, I experienced first hand the power of the web. As a coach, an anonymous source sent me pictures from a personal, yet very public, online photo album of athletes poorly representing themselves, and our school, online. Attached to my newly acquired photos was a message saying that this anonymous individual believed I should know how my team is being portrayed on the internet. How do I control this? How do we, as a school community, control this? How can we put a kibosh on the internet? We can’t. Do kids understand the power of the web? Do they understand that anybody can see their site, see their photos, see the photos their friends put on the internet without their knowledge? Students are posting their lives online without taking time to sit and evaluate the power they have with the touch of a button.

Thus, my new word this year is “filter.” I am constantly telling my students to filter their thoughts, not to blurt out in class. Consequently, however, I found myself telling my athletes to filter their lives, their photos, and their online personas. Of course, they don’t understand the impact the internet may have on their future

As I struggle to create a digital portfolio that represents my classroom and my teaching philosophies correctly, then, I wonder how others will see me. Whether it is a professional digital portfolio or a personal online photo album, teachers, students, politicians, and everyday citizens view our work. It’s how we are represented that is important.

So, I continue to ask, how are you represented on the internet?

Mind baffling.

### **You have to start somewhere: Aram's reflections on breaking out of the box**

Initially, I saw my digital portfolio (<http://www.msu.edu/user/kabodian/>) as a unique way to present what I had learned from the Red Cedar Writing Project's summer institute. Rather than share my critiques and other writings in a notebook, I would offer them online, more interactively. While a noble beginning, I had no idea that I was stepping onto a path that would challenge me to think outside of the box as well as examine that box, contrast it with other containers, and contemplate the necessity of the box at all.

Soon after constructing this initial, professional portfolio, my teaching position changed and I began teaching eighth grade language arts when I had previously been a high school special education teacher. As part of this new position, I was expected to keep a "homework page" on the school's website. Along with this practical task was the option of providing other information on my school website space. For me, this was an opportunity to explore, to play, to communicate, and to participate in a new genre in the web of language.

Simultaneously, I was asked to be a part of this digital portfolio group — something akin to group therapy with a dash of an academic-think-tank thrown in. Without this support group of fellow educators, the chances are that I would have plodded along in this process of building a website without really looking at the possibilities that lay before me to present my professional and personal life in a concerted, reflective way. I allowed myself the time to think about the implications of my

choices and then to mull over those implications within a contemplative group of learners. Listening and responding to each of their struggles further developed my concept and purpose for a digital portfolio. I believe the time I spent with the group paid off immensely in the ever-emerging digital portfolio I am constructing.

Some of the dilemmas I struggled with centered on what information to share at what depth of honesty in which contexts. I decided to have a space online to reflect on my teaching. The dilemma was deciding on which web space to put the reflection. I knew that if I put it on my school website, I would sacrifice some frankness. My solution was to put the reflections on my professional portfolio, thus being able to be more honest, but creating a link to the reflections from my school site; this provided some degree of perceived anonymity since it was not on my direct school site while also being public about my thoughts. Having two places to present my “self” offered me an odd, but useful duality. Here is an excerpt from that reflection page about this very topic:

I can't help but wonder if I could have been as honest as I've been on this reflection page if I had connected it more deliberately to my actual school website. It almost felt hidden this year due to the fact that, even though it's on the web, a student or parent would have had to really put in some extra time to find it. And I know that most of my students and parents have very little of that kind of extra time. Feeling somewhat hidden has allowed me to say what's on my mind a bit more than if this link was visible on the first page of my school website. So, “next time” do I put it on that first page or do I leave it here? Do I want a larger audience at the cost of a bit of honesty? I ask students to be honest and frank, but it seems a bit harder when there's a paycheck and a career in the balance. I'm sure

that sometime this summer the answer will come to me. (See

<http://www.msu.edu/user/kabodian/MacDonald.html> for the full reflection.)

So I was constantly aware of my audience as I added pages and information online — I had to be. One of the drawbacks of using the internet at all is that there is no monitoring system; there's no FCC-like mother looking over people's shoulders to help make decisions about what is appropriate and what isn't. We, as creators of web pages, need to be hyper-aware of our own actions on the web — our audience, our content, our purposes — if we want the web to a place worth using.

Also, it's easy to get a tad self-obsessed when we are creating digital portfolios. Sometimes we act like we're just playing with a new toy and we lose track of the real purpose behind the fun and challenge. I try to make my sites practical for students whether I'm sharing their final drafts or keeping them up-to-date on homework; even knowing that parents are one of my major audiences for the homework site is fine because that too is about student success. When we take photos from school events or visiting our buddies at the elementary school, it's important that I get that information online and tell the students it's there — once they expect it to be there, they will visit my site more often. I like to keep my "Useful Links" page current so students will use it for assignments for my class and other classes.

Sharing my educational journey on my sites is also partly about modeling life-long learning; whether I'm conveying what I did at a conference or using one of my papers linked off my site as an example of something I want them to try, I want the students to see me as a writer, as a learner of new technology, and as a critical thinker. Presenting myself "digitally," so-to-speak should reinforce and enhance the picture they

have of me as a teacher and as a person. Those pictures, though, need to ultimately point to a person who is focused on ways to help students to have every opportunity to succeed. I keep rethinking how this box of a digital portfolio actually works as well as how I can help them create their own boxes.

### **Comparing myself to others: Cathy's concerns about becoming a digital teacher**

I am thinking about Aram's "split personality" idea; the two faces that I feel represent either my public persona — teacher, mentor, and community member — or my private one, or who I am when I let my hair down, so to speak. I try to be cognizant at most times that how I behave, react, and respond to others and situations reflects not just on me personally but on my family, my school, my gender, my age demographic and even my profession. How many hats do teachers wear when we share ourselves in person, let alone online?

There's a small suspicion that if all those people viewing me online saw me in my reality, they would lose whatever esteem or respect or whatever it is that I think I represent. Without seeming self-important, there's a strange balance of the professional me and the real me, the side that I don't often expose. If I represent my students' work, I open myself to the judgment of the audience. The choices that I make in selecting the student's pieces to share on the digital portfolio ultimately reflect my teaching.

For instance, I struggle to remind myself that I do know my students, and that if their collective work isn't as advanced as another class, I'm still proud of how far they've come and how much they've progressed. By questioning the results I find and report in the portfolio, I reflect on and revise my teaching. I believe that the vulnerability of digital

disclosure is balanced by the communication opportunities that are shared with families and colleagues, which at the end of the day makes me a better educator.

## **Conclusion**

While we know that our project is just one small attempt to keep design and rhetorical decisions in teachers' hands, we feel that it has strong implications for how teacher educators and teachers think about developing digital portfolios in the future. As our stories of personal and professional learning show, the process of constructing a digital portfolio from a design-based approach that integrated teacher research into the process has yielded a number of insights that simply uploading artifacts to a template likely would not have facilitated. As we see them, digital portfolios — documents that are as a beginning point meant to be generative, reflective, and indicative of one's technological competencies — have become the end in and of themselves when the focus is only on assessment. At its worst, this is a myopic view of what digital portfolios can be for teachers. We want to rethink this vision and how the purposes and processes of designing digital portfolios for other teachers can foster the types of critical, creative, and reflective thinking that we feel this approach has developed for us.

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