The Wide and Wonderful World of ePortfolio Technology

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Abstract: Within Higher Education Writing Studies and English programs, there is discussion about the need to expand definitions of "reading," "writing," and "literacy" to reflect digital communication practices. The change of the term "literacy" calls for assignments that incorporate and appeal to the variety of ways meaning is constructed: i.e. Visual, Linguistic, Multimodal, etc. One way of transforming assignments is to transition traditional print portfolios into digital ePortfolios. The purpose of this paper is to review the benefits of ePortfolio Technology by presenting several examples of innovative, open-source ePortfolio programs. More specifically, the paper will discuss three categories of ePortfolio Technology (Visual Tools, eBinders, and Websites Tools), review the educational benefits of the programs, and provide ideas on how to transform portfolio assessment goals into digital-age experiences.

Introduction

The value of ePortfolios has been well advocated by Writing Studies and Digital Humanity Academics. Kathleen Blake Yancey and Cynthia Selfe have written and presented extensively on the need for Higher Education Writing and English programs to integrate digital literacy. In addition to Yancey and Selfe, scholars like Kress (2003), Bearne (2005), and Eagelton and Dobler (2007) are also advocating expanding definitions of "reading," "writing," and "literacy" to reflect the changes of digital communication. “Reading” now encapsulates a wider range of cues and signals. In addition to traditional cueing systems like lexicol (word knowledge), schematic (prior knowledge), and pragmatic (knowledge of audience and purpose), reading on the web and reading in digital texts incorporates operational (i.e. navigation), organizational (i.e. page layout, orientation) and multimedia (i.e. video, audio) (Eagleton & Dobler, 2007). This means that in addition to reading words, the reader as user is also taking in knowledge of website function, visual rhetoric, and signs to fully participate in meaning-making. Given these changes, the idea of “reading,” “writing” and “literacy” also beg for 21st century recontextualization, and ePortfolio technology can help students struggle and face those changes in meaning-making.

Introducing new ePortfolio technology into classroom assignments is an important way of incorporating larger learning goals. The change of the term "literacy" calls for assignments, projects, and "writing exercises" that incorporate and appeal to the variety of ways meaning is constructed: i.e. Visual, Linguistic, Gestural, Spatial, and Multimodal. ePortfolio technology helps teach 21st century skills: collaboration, creativity, critical thinking, and communication. While teaching 21st century skills, engaging with ePortfolio technology provides life skills like computer and Web 2.0 training, digital citizenship, and professional development. Creating ePortfolios allows students to link their research and work into larger conversations throughout the internet. This helps them become strong digital citizens and allows them to expand their understanding of how research is presented.

Additionally, ePortfolio technology expands into more advanced Writing Studies Theories. Given that the modern rhetoric of 21st century writing theory advocates for the fusion of verbal-visual, ePortfolios provide innovative ways for students to think about writing and for teachers to think about modality. In an article about assessing ePortfolios, Matthew Davis and Kathleen Blake Yancey quote Lester Faigly: "My argument is that literacy has always been a material, multimedia construct but we only now are becoming aware of this multidimensionality and materiality because computer technologies have made it possible for many people to produce and publish multimedia presentations" (2014). Using ePortfolio technology challenges students to transform text driven work into multimodal projects. The transformation involves thinking creatively about the content and how to use things like visuals, audio, spatial configuration, hypertexts, etc., to enhance the meaning of the written content. This wider range of meanings through the opportunities of the add-ons, hypertextuality, layout, aesthetic, and functions alter the way that audience experiences and engages with the essays. Thus, students must consider issues of genre theory, audience, and discourse communities. Lastly, ePortfolios use the writing studies theories of Visual and Verbal Rhetoric since
the writing, website, and visuals all work together to create one core meaning. By looking at three categories of ePortfolio Technology—eBinders, Visual Tools, and Website Tools—and examples of programs from each category, this paper will discuss the theoretical benefits of these categories of ePortfolios and how to use these technologies to transform portfolio assessment goals into digital-age experiences.

Three Types of ePortfolios: eBinders
LiveBinders

The term, "eBinder," is not really a technical one, but the term helps to build an association with something all too familiar in the world of paper-based Portfolio assignments: the 3-ring binder. Lots of the original work on ePortfolio’s I have read all have variations of what I would consider an e-Binder. Basic versions of e-Binders would entail any sharing of a folder with subfolders that reveal materials and documents organized by the category of the folder. For instance, programs like Google Docs allow students to create folders with content. However, sleeker programs are expanding on the folder and tabbed themes into more visual, hypertext programs.

As an example of when these sleeker programs might come into play, I was talking with a colleague and he mentioned that he teaches an art education course. At the end of the semester, he likes students to create Portfolios that reflect finished pieces, materials consulted in generating the pieces, accompanying textual documents, and whatever drafts went into the production of the finished piece. However, this created a logistical nightmare to both turn in as physical portfolio or as an ePortfolio. Because of the size, emailing and submitting to an LMS system was problematic. Although options like Dropbox or Google Drive/Docs would allow for sharing of documents and pictures, sharing any websites used as influences would have to be included in an additional text document. What he needed was a Web 2.0 program that was easily shareable, contained folders or tabs to show connections between similar materials, and allowed gathering similar information together in easily integrated links, pdfs, image files, and embedded materials.

After hearing his problem, I recommended a program called LiveBinders. LiveBinders is "Your 3-ring binder for the web" where you view pages like "pages in a book." The user creates Tabs, much like he would use in creating sections in a regular 3-ring notebook. Then, under each Label, the user attaches websites, images, or uploads files. With this hierarchy of Tabs and Labels, the LiveBinders becomes exactly as the name describes, a website that doubles as a storage binder for digital materials.

The Writing Process potential of LiveBinders is pretty limitless in scope, and only hampered by the storage space limit. Students can use the embed code to include a wide variety of multimodal components like audio files from SoundCloud, podcasts, videos, Prezis, and any other Web 2.0 that comes with embed code. Through uploading, students can add in PDF's they used for research, papers and drafts they wrote, or photos they have in their hard drive. They can also upload scanned copies of drafts with notes, link to Google Docs, or upload a Word with Track Changes. With the layout features, they could include the document on one side and reflection on the editing process on the other. With the subtabs, a student could even show the whole process: research used, first drafts and notes, revisions, final draft, and reflection.
Because of its features and sharing capability, LiveBinders has great potential. It could be a scientific lab journal that houses research on the experiment, pictures, videos, lab notes, write-ups, and lab quiz. It could be used to teach the Research Paper process by having students include links to the research, annotations in the sidebar using the two column layout, outline for the paper, first drafts, and final drafts. Art students could catalogue the process of how a piece came about through inspirations, photos, video journals, etc. Finally, LiveBinders has great scrapbook potential. Davis and Yancey wrote about the potential of scrapbook as a form of composition: “In some ways, electronic portfolios [. . .] are the 21st Century version of scrapbooks in their newness, their open-ness, their ability to provide space for many different kinds of artifacts and modalities, their ability to point readers to many different paths, their ability to incorporate and inter-relate and layer the modalities of the age” (2014). Through LiveBinders’s ability to embed, upload, include audio and video, negotiate the space and layout of pages, etc., it would provide excellent technological support for digital scrapbook projects in history classes, anthropology, composition, and more.

Three Types of ePortfolios: Visual Tools

Thing Link

As mentioned in the introduction, the movement in composition theory is embracing the expanding definitions of “reading” and “writing” and “literacy.” Specifically, Writing Studies Departments are expanding topics of writing and rhetoric to incorporate multimodal text, digital literacy, and visual rhetoric in order to think about how meaning is created both visually and verbally. Bearne writes that “Writing includes the use of images, diagrams, and layout; it is now a matter of design as well as composition. The idea of a ‘text’ is also being redefined; work on multimodal texts reminds us that there are many dimensions to representation and communication (Bearne 2005). In thinking about composition, writers in the 21st century negotiate page and screen space, various ways of visual and verbal representation, and the variety of means available to a writer to communicate with a reader. By integrating multimodal meaning and embracing digital literacy, text is now experiencing “the broad move from the now centuries-long dominance of writing to the new dominance of the image and [. . .] the move from the dominance of the medium of the book to the dominance of the medium of the screen” (Kress 2003).

In trying to think about important categories of ePortfolio writing, a category of Visual Tools seemed an important branch of technology that allowed the predominant means of communication to be visual. In looking for interesting tools that could really encourage students to focus more on the visual content, I found one called ThingLink. While LiveBinders makes me think of the creation of the scrapbook through generating multiple pages and through developing structure and sequence, ThingLink reminds me of creating posterboards and pinboards. You find an interesting image, make that the background, and then include tags throughout the picture. These tags can be video, text, audio, or links. Say a student did an ePortfolio on the Titanic. ThingLink could be a place the student “scrapbooks” various artifacts: i.e. links to video footage of the ship, pictures of passengers, podcasts, links to research, and more. Through the program, the student transforms the collections of works into a multimodal project that can be interacted with, touched, and explored through hypertext, audio, and video.
From a writing and composition viewpoint, ThingLink probably works best as a visual accompaniment to a paper, as creative writing, as a reflection piece, or as an alternative composition piece. For assessing the final projects, you could also use Moss, Girard, and Haniford's "IDA" theory that Davis and Yancey write about. IDA's are "interpretations, decisions, and actions." For ThingLink, much of the "composition" of image, audio, text, and links, would connect to choices the student made interpreting the image, decisions about what to include and what not to include, and actions required by the "reader" and actions pursued in development of the piece. Coupling the ThingLink with some sort of presentation or reflection piece on the creation process would also top the project off with a metacognitive component.

Although ThingLink looks like it can be done very simply and haphazardly, the program allows for a lot of thought and engagement. For the students who took my Education Technology course, I asked them to generate ideas on how they could incorporate ThingLink into their other classes and their professional ePortfolios. Although most created assignments that involved research based projects, one group created a ThingLink that could be given to students as the lecture in a Flipped Classroom. For professional ePortfolios, students could use them for remediated Teaching Philosophies or interactive resumes. For their own future classes, there is lots of potential for science projects, history papers, getting to know you projects, and more.

Three Types of ePortfolios: Website Tools

Weebly

For the last category of ePortfolio software, I thought about how to unite the previous two categories into a more complete, polished product. In categorizing ePortfolio Systems, Christine Tulley (2014) puts Web Design Software as a subcategory of Open Source Software. Open Source Software are all free programs available to students and educators who want to create LMS like systems, blogs, or websites. The benefits of these programs is that they allow greater flexibility and customization, have useful add-ons and features, create communal access to the members of the classroom and to the larger global community, have more student control, and allow a wider range of multimodal composition (2014). The other benefit of Website Tools is that it allows students to participate in the dialogue surrounding writing for a screen. In the age of writing for a screen, “writing” and “reading” become about representing and communicating in a way where “each mode carries only a part of the informational ‘load’; no mode fully carries all the meaning” (Kress 2003). Thus, the acts of reading, writing, and communicating become more about exploring not just the text but the space and content cohabitating with the text in order to produce meaning. If the student chooses to use two columns, buttons, hidden pages, and downloadable files, they are adding spatial meaning to the written content. Although elements like columns and white space are also options in text documents like Word, those tools still control and dictate how the reader reads and interacts with the page. Website create spatial meaning that is
then negotiated and experienced by reading in an interactive way, thus creating another level of dialogue with the content.

Because of the rising need of businesses wanting to offer websites that they can build and manage, drag-and-drop website creation programs are popping up everywhere. Most are free, allow for a lot of creativity, and are very intuitive. These drag-and-drop systems like Weebly and Wix place focus on creation, development, and multimodal integration in a more guided, scaffolded program that focuses more on interpretation than technological knowledge. Although both Wix and Weebly are strong programs, I chose Weebly because it has an education version that is designed for teachers and their classrooms, and that provides easier access, grading, and privacy. Weebly Education also has more free features than traditional Weebly, whose free version caps the amount of pages one can create at five. However, Weebly’s greatest feature is its ease of use. If a student wants to include a title, she just grabs the “Title” box, drags it to the page, and drops it. Building pages and subpages also works as drag-and-drop. Also with Weebly, I noticed increased student satisfaction in the final website and lower technology anxiety levels than when I used Google Sites. Weebly also helps students be more creative by offering lots of artistic features. Good website programs, like Weebly, have design elements built in that will help give students ideas through creative features like themes, image slideshows, video integration, and embed code.

Figure 3: Overview, Features, and Ratings of Weebly

I utilize Weebly for a variety of different assignments. Currently, the most common usage is helping my Elementary and Secondary Education students create professional ePortfolios in which they can present their artifacts and start cultivating an electronic version of their teaching portfolio. Because of being able to embed code, the student can present innovative presentations created through Google Presentation, Powtoon and Prezi and provide accompanying textual explanations on how to experience the artifacts. Some have even used the platform to remediate their Teaching Philosophies in order to further help them pinpoint who they want to be as educators. In addition to professional ePortfolios, I have also used website development to help students make interactive versions of their Freshman Composition ePortfolio’s. I have students spend the semester writing about the background, verbal rhetoric, and visual rhetoric of one year in history. Those essays go through several peer-reviews and revisions, and then the final drafts are transformed into the textual content of the website. This allows them to integrate videos, audio, interactive timelines, slideshows, and more. The final project has been especially beneficial for community college students because if provides them with a professional skill that might help in later job searches.

Conclusion
Given how the digital environment is changing the way students communicate, ePortfolio technology should be an increasingly utilized means of helping students develop imaginative, analytical, complex, and creative ways of reflecting on learning. e-Binders, Visual Tools, and Website Tools are all ways of translating the same piece of information across three different mediums. Additionally, ePortfolio technology provides more means of composing through hypertexting, visual rhetoric, and multimodal construction. Although ePortfolio technology is especially worth exploring by Language Arts and Composition teachers, the ease of access of these programs also create a wide variety of assignment options across disciplines. I started using websites for my end of semester composition assignments after seeing a conference presentation by a history professor who had students create WordPress sites in his Southern History class. Especially in Higher Education, we need to commit to the innovative technology work that students are accessing in Elementary and Secondary Education and continue to help students build their 21st century skill set of communication, collaboration, critical thinking, and creativity. Transforming one traditional assignment into an innovative ePortfolio technology assignment would allow students a different way of accessing their learning and developing their own meaning-making.

Works Cited:


