

ELECTRONIC PORTFOLIOS ON A GRAND SCALE

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Abstract: A PT3 team discusses their trials, tribulations, and triumphs of implementing electronic portfolios at a larger teacher certification university with programs across several departments and colleges. The presentation will share the templates designed, training provided for implementation, and technology advancements and purchases dictated by the implementation.

With the move of NCATE toward a documentation developmental portfolio, many teacher education institutions are taking the process to a digital format. This makes a lot of sense considering the wider range of artifacts that can be included in a very compact archiving format. The ease of cross-referencing artifacts to multiple standards is another benefit. Over the last few years, we have attended many conference presentations on digital portfolios. We have gained much insight into format, style, and artifacts. However, we were often left wondering how to translate the information to our particular situation. Many of the presentations dealt with relatively small student populations and a few faculty members in the portfolio development process; but our institution is considerably larger with over 100 faculty and approximately 3000 teacher certification students. Our college has decided that electronic portfolios will be required as part of all teacher education programs. Students are required to have an electronic portfolio begun as part of their admission process to the teacher education program. Fall 2001 was the first year of this new admission requirement, so in three years ALL education majors will have developmental electronic portfolios. This paper will share the lessons learned though our last two years as we have begun the development and implementation of electronic portfolios. We will share information on the questions we asked and answered, the problems that occurred, and the team building that was necessary for a project this size.

Building Ownership

While the PT3 grant team had been charged with assisting with the implementation of the electronic portfolios, we knew that we could not infuse the portfolios across the entire teacher certification program by ourselves. Because the programs are distributed across multiple colleges on campus, we decided to use a built-in mechanism to assist with the implementation. The College of Education Associate Dean provides the central link for all the undergraduate teacher certification students across campus. His office is responsible for filling the applications with the State Department of Education. This Associate Dean established a Teacher Education Coordinating Council (TECC) that works on the unifying processes that are necessary to have conformity of

requirements. In the past this council has dealt with such issues as student teaching evaluation forms, student teaching handbooks, and pre-student teaching meetings. This group seemed the logical place to begin.

The members of our PT3 team attended several meetings of TECC, explaining the expectations of NCATE and the potential of electronic formats. A committee was then formed from TECC and PT3 to work with the Assistant Dean to establish some standards for the electronic portfolios at IUP.

The Templates

The portfolio committee met several times debating questions such as: content that should be required of all students, what should be optional, confidentiality of information, what the expectations should be, rubrics, and formats. The student teachers had been required to make portfolios for several years; however, these were hiring portfolios created in their senior year. The requirements for these portfolios gave us a place to start with some of the content requirements. It was decided that all portfolios would include a resume, philosophy statement, health screenings, clearances, and transcripts. The final discussion was the inclusion of standards --- Which ones? We had seen portfolios built on NCATE standards, ISTE standards, and INTASC standards. After some discussion, it was decided to use NCATE standards in our electronic portfolios. Members of the committee put together three different forms of the portfolio as examples to share with TECC: PowerPoint, HTML, and Word.

Templates were created that the students would be able to personalize, but the basic content would remain consistent. The templates began with a home page. This page included the name, contact information, major plus links to the resume, philosophy statement, health screenings, clearances, and transcript pages. A menu line is included on all the major pages of the templates allowing for easy navigation. Instructions on the pages tell the students to cut and paste information into the page or insert images of scanned documents.

The standards page becomes a little more involved. The NCATE standards can be rather lengthy to include all of them on one page, so the committee decided to abbreviate the standard statements on the initial page. When you click on an individual standard you are taken to another page that provides the entire standard statement. Students are then to include artifacts that illustrate their progress toward meeting the standard. We have established practices of reflective statements in our education programs, so this was continued into our electronic portfolios. The students are asked to reflect on the artifact attached to a statement, explaining why it is being used and what it says about their working toward the standard. Students are encouraged to use artifacts to illustrate multiple standards, which was difficult in a traditional portfolio.

Spreading the Word

One week long workshop on creating portfolios was offered during the summer. Faculty at this workshop were taught how to use Netscape Communicator and how to modify the templates. The foreign language faculty attending the workshop wanted to include their professional standards into the templates. The PT3 team assisted with this modification. During Fall 2001, the PT3 team offered a series of workshops focusing on implementing the portfolios. Workshop topics were: Using Netscape Communicator to Create Electronic Portfolios, Using MS FrontPage to Create Electronic Portfolios, Inserting Graphics into Electronic Portfolios, Adding Video to Electronic Portfolios, Adding Audio to Electronic Portfolios, Using a Digital Camera for Electronic Portfolio Artifacts, Incorporating Artifacts into Electronic Portfolios, and Burning CD's. Interest in portfolios began to increase as people began to see ways to utilize the portfolios in their individual courses. Handouts were created on each of these topics to enable faculty to review on their own and to reduce the amount of preparation time they would need to introduce portfolios in their own courses.

The PT3 team attended a meeting for the education faculty across campus looking at the upcoming NCATE review. The electronic portfolios were shared at this meeting. We offered to assist departments with the implementation. Subsequently, we attended a departmental meeting to share the portfolios and answer questions. The PT3 team worked with several departments, making nearly 20 visits to individual classes,

modeling for faculty how the portfolios could be developed with students. The templates have been made available to students in classes, from internal servers, and our PT3 site (<http://www.coe.iup.edu/PTTUT>).

One faculty member, who had been a part of the TECC Portfolio Committee, began the semester utilizing portfolios with the students in her program. She has provided the PT3 team with much needed feedback on how the templates work and how we might improve the process. Similarly, by co-teaching classes with faculty, we gained feedback that was used to improve our templates and handouts.

During the semester break two separate workshops were offered. One day long workshop assisted faculty members in making example portfolios for their individual programs and courses. The second workshop encouraged departments to begin looking at the larger picture of where artifacts could be created and how their department would systematically integrate electronic portfolios.

Support for Student Portfolios

The College of Education and Educational Technology at Indiana University of Pennsylvania actively supports and assists the students as they develop their portfolios. Not only do we provide portfolio templates for our students and train our faculty how to teach the students the necessary computer skills to create their portfolios, but we also provide a special Portfolio File Server for students to use as a repository for their portfolio files. Each student is currently provided 40 megabytes of storage on the Portfolio File Server, and students can request more space if needed. Each student has a folder, identified with their user name, on our Portfolio File Server, and the access rights are set such that only the student has access to the folder and any files within the folder. The Portfolio File Server does not provide web access to student portfolios because of our concerns about confidentiality.

In addition to the Portfolio File Server provided by the College of Education and Educational Technology, the university provides additional special server storage space for students to share portions of their portfolio with their faculty on a Project Directory Server. The graphic below shows the folder structure of the Project Directory Server. Each semester, a folder for each course taught at the university is created on the Project Directory Server. Within each course folder, there is a folder for each section of the course. Within the section folder, there are several folders including a hand-in folder for students to submit assignments, an information folder where faculty can place files they wish to share with students, and a student folder for use by the students enrolled in the particular section of the course. Within the student folder, there is a separate folder for each student, and only the student and the faculty member teaching that section of the course have read and write access to the individual student folder. The student folder provides space for sharing files, including portions of their portfolio, with the faculty member teaching the course. Since only the students have access to their own personal folders on the Portfolio File Server, students can copy portfolio artifacts from the Portfolio File Server to their folders within a course section on the Project Directory Server where their faculty member can view the files.

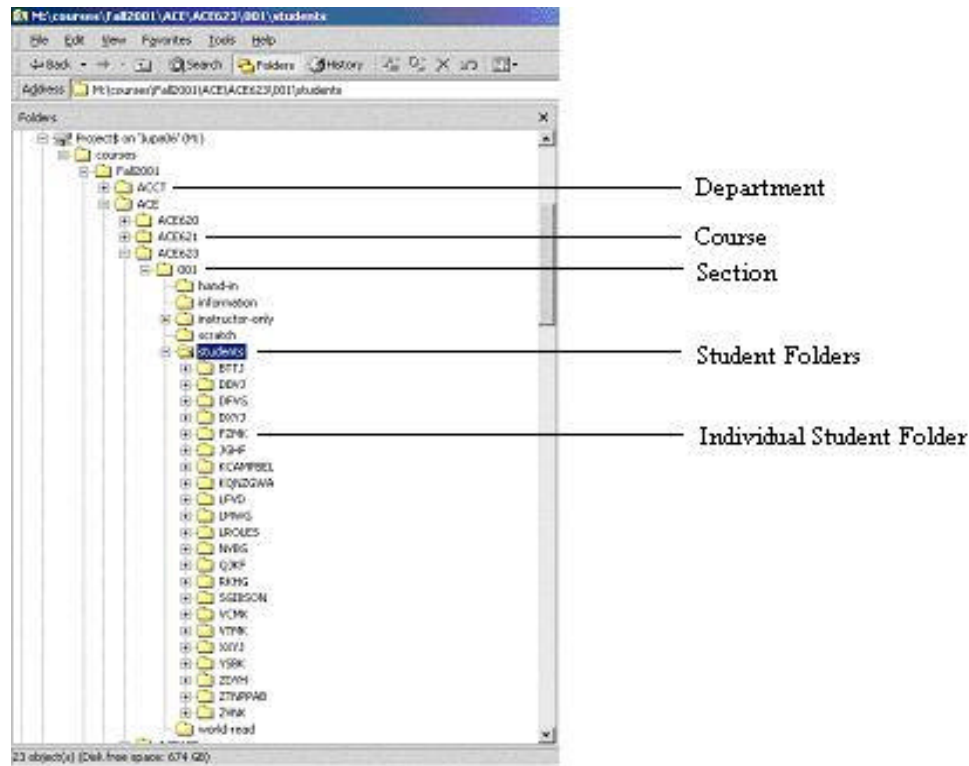


Figure 1: Project Directory Server File Structure

Since the Portfolio File server does not provide web access, if students wish to place part or all of their portfolio on a web server, we recommend that they use one of the many free web hosting sites or contact their Internet provider for web space.

Students can burn a copy of their portfolio to a CD when they need to share their portfolio with other people. We have provided multiple CD burners for this purpose in each lab within the College of Education and Educational Technology at the university. All of the computer labs within the college have scanners, CD burners, and web page development software.

The College of Education and Educational Technology has also created a Portfolio Studio where students can get additional instruction on using CD burners, scanners, digital cameras, video editing equipment, web page development software, and other helpful tools for portfolio development. A graduate assistant and practicum students are available in the Portfolio Studio to assist students and faculty.

Conclusion

While the integration of electronic portfolios is far from finished at our institution, we feel we have made great headway. There are still questions to be answered and hurdles to be overcome, but the departments are beginning to wrestle with them. For example, questions still remain on mechanisms for advisor review of portfolios at different stages of student progress through their programs, as well as on organizing the college portfolio server. Moreover, the PT3 team could not design each program's portfolio - that needs to be done internally. Nonetheless, the challenging task of creating the training, instructional materials, and infrastructure for nearly 3000 teacher preparation majors to create electronic portfolios is well under way at our university.