

E-Portfolios for Student Teachers—Second Year of a Pilot Program

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Abstract

The Teacher Education Department at the University of Indianapolis has completed a two-year pilot program to enable student teachers to digitize their capstone portfolio for the student teaching experience. The Exit from Program Portfolio for Initial Preparation Programs, the third and final benchmark for completion of the licensure program, is based on the ten INTASC standards and is designed to maximize candidate reflection on teaching and learning during the first of two eight-week student teaching placements. During the first year of the pilot (2002-2003), volunteer candidates used Dreamweaver 4 to create e-portfolios. Though all pilot candidates were successful in completing the benchmark, problems arose with teaching and using Dreamweaver, and a determination was made that more user friendly software should be used. In the second year, candidates used Lectora software published by Trivantis Corporation. Software instruction was easier, but additional problems arose when Lectora was not available as promised for the Macintosh platform. Issues remain as full implementation for all candidates is scheduled to begin during the 2004-2005 school year. Sample portfolios will be demonstrated and additional questions concerning E-portfolios will be raised in the session.

The Setting

The University of Indianapolis is an independent comprehensive university affiliated with the United Methodist Church. It serves 3,700 students and offers associate, bachelor's, master's and selected doctoral degrees in arts and sciences, education, business, and health sciences. There are 191 full-time and 198 part-time faculty. The preparation of teachers has been prominent in the mission of the institution since the beginning in 1902. Teacher education programs were successfully reaccredited by NCATE during the 2003-2004 school year. The department's Unit Assessment System (UAS) was designed over a period of years to assure that graduating candidates are of high quality and meet all of the ten INTASC standards and the subject-matter standards mandated by the Indiana Professional Standards Board. The final piece of the UAS is called Benchmark #3 and consists of a paper student teaching portfolio with major sections including a table with references to each of the ten INTASC standards, culture and climate of the school and community, students with special needs and services, a sequence of five lesson plans (including reflections and analysis of student learning), documentation of professional involvement, and a 45-minute video of teaching.

INTASC Principles:

1. Knowledge of Subject Matter
2. Knowledge of Human development and Learning
3. Adapting Instruction for Individual Needs
4. Multiple Instructional Strategies
5. Classroom Motivation and Management
6. Communication Skills
7. Instructional Planning Skills
8. Assessment of Student Learning
9. Professional Commitment and Responsibility
10. Partnerships

The paper portfolio has been a high-stakes assessment for six years. Discussions over the last three years have focused on ways this benchmark could be made a more powerful tool for candidate reflection. Converting from paper to a digital medium, allowing greater linking of sections and ideas, was explored. In order for software to be useful for this pilot, several requirements were required. We searched for portfolio software that would be cross-platform (both Macintosh and Windows platforms are used in the department); the learning curve should be manageable; and there should be no technical difficulties for reviewers. Through a Title II grant, necessary hardware and software were purchased. A digital camera and three digital camcorders (two of them with wireless microphones) were obtained for the project. Two rolling carts were equipped with laptop computers (one with Windows, the other with Mac OS 9), CD burners, printers, external Zip drives, and a scanner. An ample supply of CDR's, Zip disks, inkjet printer cartridges, and photo printer paper were stocked.

The university's Center for Instructional Technologies worked with faculty in the Teacher Education Department to develop a portfolio template using Dreamweaver software. The plan was to burn the final HTML files including videos onto compact discs for each candidate. One CD would be given to the student teacher, another would be given to two reviewers who would determine whether the portfolio was a "pass" or "not pass." In case of a tie, a third reader would be given the document. If two reviewers did not pass the document, the student teacher would do a new portfolio during the second eight-week student teaching placement.

The First Year

During the fall semester of 2002-2003 eight volunteer student teachers participated in the first e-portfolio pilot program and signed an agreement protecting both the candidate and the institution. Candidates were allowed to quit the pilot at any point if it became impossible for them to continue, and the university was given permission to show their final products to others. Assurance was given that no candidate would fail the portfolio process due to technical difficulties. It was the hope of the faculty that the candidates would choose to digitize video of their lessons, edit them with iMovie, and integrate video clips into the e-portfolio to enhance reflection on the INTASC standards and student learning.

One staff person from the Center for Instructional Technologies and one teacher education fac-

ulty member provided semi-weekly training throughout the student teaching experience for the pilot group. The candidates also attended regular student teaching seminars and help sessions with non-pilot student teachers. Surveys of pilot group attitude and opinion were administered at regular intervals. Midpoint and endpoint surveys of the pilot group indicated that at the end of the project they were very pleased they had undertaken the e-portfolio project. They were able to show an impressive final product. However, most of them felt additional anxiety with the Dreamweaver development on top of what was a stressful student teaching and portfolio process for everyone. It was obvious that members of the self-selected pilot group were highly technically proficient before joining the pilot process. They expressed doubt that this process could be successful if used with all student teachers.

All eight of the first group were successful in completing the digital portfolio and passing student teaching. Of that group, however, only two were able to digitize portions of their videotape and create hyperlinks within their portfolio due to receiving encouragement and assistance from their university student teaching supervisor. Lacking this assistance, the others did not even attempt to digitize and link to video.

Minor refinements to the procedure were made for the spring semester of 2003 when the volunteer pilot group numbered six student teachers using Dreamweaver. Most procedures were the same as in the fall. Surveys produced similar comments as in the previous semester: Dreamweaver was too difficult to master in the midst of student teaching and producing a high-stakes portfolio of any kind. The basic idea seemed to be a good one, but technical difficulties, particularly with mastering Dreamweaver 4, persisted.

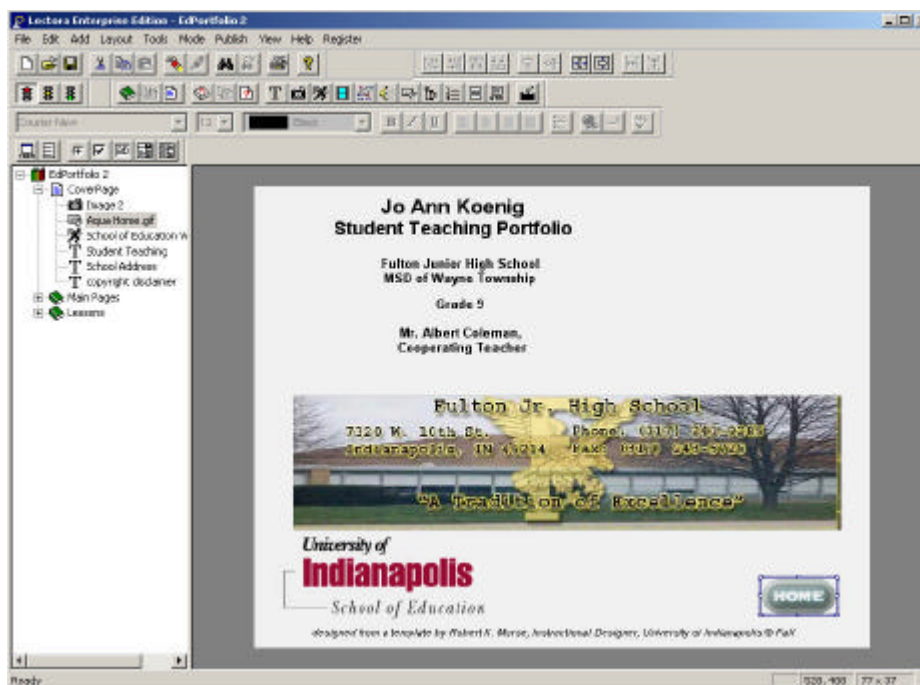
The Second Year

With the realization that Dreamweaver was not a viable option, several faculty meetings were held with staff of the U of I Center for Instructional Technologies to determine how to proceed for a second year of pilot development. Software options were PowerPoint, HyperStudio, LiveText, and Lectora. Lectora was finally chosen as being the most powerful, most practical, and almost the easiest to learn. Its single drawback was that it was for Windows platform only. Faculty received assurances from the publisher, Trivantis Corporation, that a Macintosh OSX version would be available during the fall of 2003. (<http://www.lectora.com>)

The Center for Instructional Technologies once again prepared a portfolio template, this time using Lectora. For the second year pilot a single teacher education faculty member was assigned to do the training and spent a fair amount of summer time learning the software. The department purchased software to install on computer lab machines. Each candidate was also given a licensed copy of the software to use during the pilot program. This gave Lectora a further advantage of being installed on the students' own computers, something that had not been possible with Dreamweaver.

Numbers were small for the second year with only four candidates during the fall semester. One dropped out after several weeks; two completed the digital portfolio, and one had to submit a paper portfolio because of a disk problem. The second semester there were three candidates in the

pilot. Two completed the portfolio, and one quit halfway through. The two candidates who did not complete the portfolio felt they could not spend the extra time it took for this project.



Lectora Template

The candidates who completed the portfolio as well as the one who lost her files felt that this was a good experience; they would all do it again. Some of the comments on their evaluation of the program were: fewer help sessions at the beginning and more the last week before it was due; they were afraid of what might happen at the last minute due to a technical failure; the Lectora software was easy to learn, but it took time playing with it to get the idea of what it could do. Some candidates had problems with getting the buttons they created to go where they wanted them to go.

Lectora uses drag and drop for text, graphics and video. The text must be saved as text or as rich text from Microsoft Word. The program will update the text as it is changed and saved. All files are stored in folders, one for text and one for images. Lectora organizes files as books with chapters and pages. In the template the chapters were set up for the candidates. They had to add more pages as they were needed. This program is like any other multimedia authoring software. You can add buttons as well as hypertext. You can publish the file to a single executable file, as HTML or to CourseMill. The program is very versatile in the things it can do. This would be a good program for using multimedia in classrooms.

Conclusions and Questions

U of I Teacher Education faculty members believe the time for piloting has ended, and the time for full implementation is at hand. Pending availability of a Macintosh version of Lectora, it may not be feasible for Lectora to be the software for full e-portfolio implementation with student

teachers. PowerPoint is again on the table as a practical, easy-to-use piece of software that might allow student teachers to concentrate on content rather than on the digital process. The department also requested permission to create a Blackboard course for each of our student teachers. Student portfolio models using Blackboard have been developed at other universities. Candidates might customize the buttons to link to Career Goals, INTASC principles, References, lesson plans, and the like. Evaluators would have guest access to the course. The portfolio could be modified after successful conclusion of student teaching to become an employer portfolio. Others will determine whether the Teacher Education Department will be given permission to create such a large number of Blackboard courses for student use. Drawbacks of Blackboard include lack of portability of the final product and the immense amount of disk storage space that might be needed to run and archive all the portfolios. We are also considering using an external vendor who would store the portfolios off site. TaskStream is a product that has been recommended for our consideration

The reflective power of the e-portfolio for student teachers has been demonstrated through our two years of pilot development. We must still refine the element of reducing “techno anxiety” to a manageable level for all of our student teachers while maintaining the integrity of the e-portfolio medium.

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More information on the INTASC Principles may be found at:
http://www.ccsso.org/projects/Interstate_New_Teacher_Assessment_and_Support_Consortium/