

## **Feel the Burn: Electronic Portfolios In Agricultural Education**

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### **Introduction/Need for Program**

Teaching portfolios are being used in teacher education programs providing students with a personal tool for reflecting on their teaching ability, knowledge and understandings. Hurst, Wilson, and Cramer (1998) defined portfolios as reflective summaries of self-reflected artifacts, representations of teaching credentials and competencies, holistic views of teachers and documentation for strengthening interviews. Artifacts typically include the teacher candidate's resume, personal philosophy statement, professional goal statement, self-reflections, examples of lesson plans and unit plans, current grade report, and letters of recommendation. The artifacts are compiled by the teacher and placed in a binder. However, problems exist regarding portfolio binders. Teacher candidates perceive the portfolio to be costly to produce. In an interview, it is awkward to utilize and difficult for the administrator to examine in the time allowed (Irby, & Brown, 1998).

An alternative to the traditional portfolio is the electronic portfolio. Electronic portfolios document video, photos, and text available within one form of media. According to Sheingold (1992), through using technology to store student portfolios, we can make their work portable, accessible, and more easily and widely distributed. We can also replay performance works anytime. A research study by McKinney (1998), showed creating electronic portfolios allowed students to be reflective, and participants viewed the experience as positive and useful (McKinney, 1998).

### **How it Works**

In Spring 2000, the Agricultural Education Program at OSU secured funding through the OSU Assessment Office to hire a Portfolio Assistant to aide agricultural education teacher candidates with preparation of student portfolios. Additionally, the Portfolio Assistant was assigned the responsibility of piloting an electronic portfolio. A goal was established that in Fall 2000 every teacher candidate would have an electronic portfolio to supplement his or her paper portfolio. Teacher candidates were responsible to submit artifacts in the form of videotapes, lesson plans, goal statement, philosophy statement, SAE policy statement, grade report and resume to the student assistant. This portfolio assistant then organized and recorded the information on a compact disc (cd). In the interview setting, the teacher candidate could leave the compact disc (cd) with the administrator. The advantage would be the administrator could view another dimension of the teacher educator's credential, and by leaving the electronic portfolio with the administrator, he or she may view the electronic portfolio at a later date and in more depth.

## **Results and Data**

The Agricultural Education program at Oklahoma State University has seen direct benefits by having its teacher candidates complete an electronic portfolio. All students in the Fall 2000 student teacher class submitted materials to be recorded in the document. Artifacts demonstrated were a resume, grade reports, lesson plans, philosophy statements and goal statement, photos and 15 second video excerpts from teaching experience. The Portfolio Assistant utilized a html format in creating the electronic portfolio and burned it onto a compact disk. Teacher candidates also submitted a portfolio as in the past. The electronic portfolio should not replace the written portfolio; rather it should supplement it.

## **Costs/Resources Needed**

Several resources are needed to effectively produce an electronic portfolio. Multi media equipment needed, including costs, are: a video capture card (\$300), scanner (\$200), computer, and compact disks. Other expenses associated with this project are the undergraduate assistant's office space and salary estimated at \$400 a month.

## **Future Plans/Advice**

Many aspects to electronic portfolios have been learned through this process. Although some problems have been encountered, the majority of the project has been extremely positive. Many teacher candidates do not have the technology available or the knowledge gained to create the documentation. Therefore, the undergraduate assistant's role is viewed as a vital aspect in creating successful electronic portfolios. Future plans include enhancing teacher candidate's computer skills, as the electronic portfolio would force students to learn a new program and adapt to others available. In reality, the portfolio binder could be minimized, even eliminated, leaving a compact disk with the administrator to review many times allowing him or her to chose the best candidate for the job.

## **References**

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