

The road to electronic assessment: An examination of one college's systematic process
for evaluating and recommending electronic portfolio software

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The world of digital assessment is upon us. While portfolio-driven assessment has been popular for decades, only recently have these portfolios migrated into the digital realm, allowing learners to store their portfolio artifacts on a centralized server, and disseminate them when, where, and however they choose. The electronic portfolio industry is relatively young, and is therefore subject to all the dynamics and variability of any other emerging technology; some companies will survive, but many will likely fade away or be assimilated into competing products. When the leadership at Northern Arizona University's (NAU) College of Education decided to investigate the use of electronic portfolios, staff members from NAU's Preparing Tomorrow's Teachers to Use Technology (PT3) grant were asked to assist in identifying a potential e-portfolio software vendor. It soon became apparent that with so many different vendors, each with unique software features and limitations, the process of evaluating and recommending a particular product would have to be done in a systematic fashion, utilizing proven organizational decision-making methodology. In the end, NAU's e-portfolio evaluation/recommendation team utilized a series of weighted-criteria decision matrices to systematically compare various e-portfolio software products. These decision matrices allowed the evaluation team to 'weight' individual criteria heavier than others, and also put various criteria into weighted categories.

In order to facilitate global comparisons, the evaluation team decided to group various criteria into the following categories: technical, administrative, pedagogical, reporting, and vendor background. The "Technical" category includes criteria such as: integration with course management systems, data ownership, and software architecture. "Administrative" criteria includes: general usability, administrative functions, and automation of roster management. "Pedagogical" criteria include: feedback mechanisms, artifact dissemination, and multiple-reviewer capabilities. The "Reporting" category dealt with criteria such as: custom reporting capabilities, raw-data export, and performance gap-analysis features. The "Vendor Background" category allowed the evaluation team to examine the overall company-strength, due-diligence, market share, cost, and support-options for each vendor. However, before developing and completing the decision matrices, all of the viable e-portfolio software vendors were invited to demonstrate their product and answer any questions the evaluation team may have.

The evaluation team considered a viable vendor to be one which had comparable items in each criteria category; if a vendor, or option, did not have features in each category, they were omitted from the evaluation process. The following products were considered throughout this process: College LiveText, FolioTek, iWebFolio/Tracdat, Masterfile, and TaskStream. It is worth noting that the Open Source Portfolio Initiative (OSPI) was also demonstrated and tested, but lacked crucial reporting capabilities, so it was omitted from

the final evaluation. Over a three month period, NAU's e-portfolio evaluation team attended a series of these demonstrations and had numerous follow-up conversations with each vendor's sales and technical representatives. In addition, the recommendation team spent many hours using each competing product throughout the investigation period. Ideally, the evaluation team would have access to a criterion-based evaluation matrix at the outset of the investigation period. However, as this was a learning experience for most members on the evaluation team, the decision matrices were not completely developed until the final phases of the investigation, as team-members became aware of features that should be compared. This led to some retroactive evaluations, repeat vendor-demonstrations, and numerous question/answer sessions with vendor-representatives to answer specific questions that were being considered in the matrices.

Through demonstrations, question/answer sessions, using the tools, and contacting current users of each product, NAU's e-portfolio evaluation team discovered some common limitations, common benefits, and a host of proprietary features unique to individual products. This paper will discuss the findings of NAU's Electronic Portfolio evaluation team, but perhaps more importantly, will discuss the systematic process used to evaluate various electronic-portfolio options.