Satisfaction with Data Management Systems in Standards-Based Alignment

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Our recent research (Everhart and Gerlach 2011) provides some insights that may be of interest to teacher education unit leaders involved in standards-based alignment of their programs using data management system (DMS) products. These products offer a variety of functions ranging from portfolio capabilities and/or simple data-related functions to more complex data functions and even a combination of portfolio and more robust data aggregation functions (Barrett 2009; Everhart and Hogarty 2009; Pecheone et al. 2005; Sherry and Bartlett 2005; Wetzel and Strudler 2005). Understanding the product functions is essential in selecting the appropriate product. Whether the DMS products are commercially developed or designed by local instructional technology staff, they should allow unit faculty to tell which professional and accreditation standards are being met and how they are being met. The capabilities of the products vary, enabling some units to show program completers’ performance standards as a juxtaposition of standards and assessment results with aggregated and disaggregated data as a function of the entire DMS package (Everhart and McKethan 2008; Everhart and Hogarty 2009). Such functions are important factors in the product selection decision in teacher education units across the country.

Selection of Systems
The selection of commercial products used by teacher education programs and units over the last decade has occurred primarily as vendors have demonstrated their robust DMS functions at annual meetings related to teacher education accreditation and assessment or as colleagues have shared with one another what is being used at different campuses. We studied stand-alone products that can generate portfolios but also enable clients to assess student artifacts and aggregate and disaggregate results robustly without having to purchase other components or add other companies’ products.

Even with the availability of complex product capabilities, some teacher education programs have opted for simpler products or homegrown solutions developed by campus instructional technology staff. Unit faculty must decide how they are going to use the products and then select the best possible product for their assessment and/or portfolio needs. With such a variety and if the type of institution or product (commercial or IT-developed) makes a difference in how unit heads perceive the use of OAPs in their units.

Description of Our Study
We developed a questionnaire to ask teacher education unit heads to identify which products, if any, they were using and the primary purpose for this use. Then we asked about their satisfaction with the effectiveness of the products in helping to align their programs with professional standards. The questionnaire was delivered via email using snap.com software to more than seven hundred unit heads affiliated with the American Association of Colleges for Teacher Education and/or

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of needs and preferences, the question for unit heads (deans, directors, coordinators, chairs) must be, “Which products are helping our unit align with the professional academic program and/or accreditation standards most effectively?”

We explored the perceptions of teacher education unit heads across the country about the data management systems they use in standards-based assessment. We sought to determine how online assessment products (OAPs) are used in teacher education, what unit heads perceive about the alignment of standards in relation to the specific OAPs being used, the National Council for Accreditation of Teacher Education. However, ninety-six emails were returned as undeliverable. Following a reminder message, 106 completed questionnaires were returned for a response rate of 17 percent.

Chi-square analyses revealed that LiveText was used significantly more than any other product. This finding led to a three-way classification: (1) units using LiveText, (2) units using all other commercial products, and (3) units using products designed by instructional technology staff on campuses. More (continued on page 13)
construction, documentation style sheets, sample papers, and documentation software (NoodleLib).

- Development of workshop sessions on how to craft ITL assignments that maximize the ability of students to demonstrate the desired skills.
- Development of a “best practices” repository of ITL assignments that can be shared.
- Within each discipline or department, development of a brief statement of common expectations for information technology literacy as well as the instructional strategies desired to address general education learning goals in response to the artifact assessment; a form could be developed and submitted with the discipline’s or department’s annual outcomes report.

After several of these ideas were implemented and recorded in annual reporting, the committee could determine if the college would benefit from repeating the study.

A second study on the “communication” outcome is under way and a rubric for the “global awareness” outcome has been completed. It is important to add that this model comprises only one aspect of the general education assessment plan. As Middaugh (2010) stated: “Note: No single strategy is sufficient, in and of itself, in describing student learning. Assessment of student learning outcomes requires the use of multiple measures to provide adequate evidence of student cognitive gains.” By triangulating data (annual outcomes reports, faculty observations and anecdotal information, and the interdisciplinary approach of the Johnson County model), Carroll Community College faculty believe they can provide continuous improvement of learning and help students achieve greater success in general education.

References

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than half of the other commercial products category was filled by Task Stream, Chalk and Wire Learning Assessment, and TK20, although some other products were being used by one or two units.

Just 13 percent of unit heads reported that the DMS products were used only as portfolios required for program entry and/or exit; 58 percent said they were used as assessment systems while also storing artifacts submitted by teaching candidates and assessed by faculty. Another 19 percent indicated that the products were used for portfolios at entry and/or exit, but other assignments were submitted as well. A chi-square analysis did not reveal a statistically significant difference for type of use.

Some 62 percent of the unit heads who responded perceived that the DMS products they used played a partial or major role in aligning their programs with professional standards. Of the unit heads who indicated that the product played a major role, 80 percent were satisfied with the product. Conversely, 48 percent of unit heads who said it did not have a major influence on alignment expressed dissatisfaction with the product. In summary, unit heads were more satisfied if the products they used played a major role in aligning their program with standards than if it functioned strictly as a portfolio tool or even as a tool for some isolated assessments.

Institution type did not play a role at all in how products were used by programs and units. Though not statistically significant, satisfaction with commercial products was slightly higher than satisfaction with products developed on campus by instructional technology staff.

Summary of the Implications Based on the Findings

In our study almost 60 percent of unit heads indicated that they used DMS products as a major component of their assessment systems. Only 13 percent used the products for portfolios alone. Only 21 percent of the respondents indicated that little or no alignment role was played by DMS products. The type of institution made little difference regarding data management system use and the standards-based alignment role played by these products. Satisfaction with them drops if the products are not used as a major part of an assessment system.

Unit heads preferred the use of commercial products such as LiveText, Chalk
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provide some rough measure of progress. For example, Seton Hall faculty are working hard to incorporate systematic attention to universal proficiencies into the curriculum, including numeracy. We will be alert to methods that can assess if this effort has made a difference in student skills. However, we found that there is an element of test fatigue in the sample of students who respond to the survey. By the fourth administration of the math test in spring 2010, the number of responses had declined to 400 from 940 in spring 2007. For this reason we did not conduct the survey in spring 2011.

As a foray into the assessment of disciplinary knowledge, the psychology department was engaged to prepare a similar fifty-question test; three levels of difficulty were used. This survey was sent to 198 psychology majors only, rather than to the entire undergraduate student body. Ninety-eight responses from thirty-four individuals (17 percent response rate) were received and the average respondent answered 2.9 questions. The results for correct answers showed good separation of intended difficulty levels and self-reported class standing. The low numbers, however, underscored for us the challenge of applying this technique to a smaller population.