Using an Online Assessment System to Support the Program Report Process in Physical Education Teacher Education

BRETT EVERHART   ROBERT MCKETHAN

Simplify your program accreditation process!

In teacher education programs across the country, the latest trend within the accreditation process is to integrate assessment systems with online assessment products (OAPs). These products or systems enable academic programs to collect and store candidate artifacts that are aligned with professional standards and assessed by faculty using appropriate rubrics. The development and implementation of such an assessment system is one of the most important initiatives a program can undertake. Consequently, the intent of this article is to discuss how to use an OAP to support the preparation of the program report for accreditation by the National Council for Accreditation of Teacher Education (NCATE). It is not the intent to show all the elements that should be included within the report, but rather to offer a guide for setting up and using an OAP by showing selected examples of an OAP in place.

To understand the value of an OAP, imagine an accreditation site visit in which the visiting team requests a number of artifacts to demonstrate examples of candidates’ work in relation to specific standards, as well as a report showing how various demographic groups performed. In addition, the team asks for proof that the process for measuring the performance of candidates is reliable. It is possible to fulfill these requests without an OAP, but it would be a much more difficult and time-consuming process: phone calls would be made and emails sent to various faculty and administrators to piece together the evidence needed in a painstaking effort. An OAP can streamline this process.

The Program Review Process
The assessment and accreditation needs of programs most often revolve around the NCATE standards and specialized program assessment (SPA) standards, which, for physical education, have been devised by the National Association for Sport and Physical Education (NASPE).

In 2001, NCATE officially began a new accreditation process that required the academic program areas to demonstrate that their candidates were meeting the competencies outlined in the list of standards provided by professional organizations and NCATE. This revision of the accreditation process meant that programs must align artifacts to standards and outcomes and meaningfully assess those artifacts to
Table 1. Contact Information for Major Online Assessment Companies

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<thead>
<tr>
<th>Company</th>
<th>Web Site</th>
<th>Phone</th>
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<tbody>
<tr>
<td>Blackboard</td>
<td><a href="http://www.blackboard.com">www.blackboard.com</a></td>
<td>888-719-6123</td>
</tr>
<tr>
<td>Chalk and Wire Learning Assessment, Inc.</td>
<td><a href="http://www.chalkandwire.com">www.chalkandwire.com</a></td>
<td>877-252-2201</td>
</tr>
<tr>
<td>LiveText</td>
<td><a href="http://www.livetext.com">www.livetext.com</a></td>
<td>866-548-3839</td>
</tr>
<tr>
<td>TaskStream</td>
<td><a href="http://www.taskstream.com">www.taskstream.com</a></td>
<td>800-311-2201</td>
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demonstrate candidate proficiency. For example, academic programs must show evidence of planning ability, teaching performance, impact on P-12 student learning, and content knowledge demonstrated by the satisfactory completion of standardized licensure exams.

Once academic programs have decided on the specific assessments that are to be used to demonstrate candidate proficiency, they must produce three years worth of aggregated data on program graduates. Due to the requirement of multiple data types, assessment instruments, and descriptions used to create a new alignment with professional standards, it would probably be more helpful if an electronic assessment system were used on a formative, regular basis to collect, store, and report the data each academic year. One way to do this electronically is for the unit, institution, or academic program to develop a relationship with a company that provides an OAP. Depending on the specific company, an OAP should have the flexibility to be able to collect, aggregate, and interpret any data required for various types of accreditation processes.

A JOPERD feature in 2006 published guidelines written by PETE professionals to assist colleagues in meeting expectations for accreditation purposes. The articles discussed how PETE programs could develop a comprehensive process for building an effective assessment system (Senne, 2006), how to create appropriate rubrics (Lund, 2006), and how to interpret which evidence and assessments are related to the 10 NASPE standards required for the NCATE program report (Hacker, 2006; Mitchell, 2006). Additionally, Martin and Judd (2006) described what reviewers look for when conducting a program review. While these articles included much helpful information, little was mentioned about the development of a systematic online assessment system that supports the accreditation requirements (including program report generation). Indeed, little has been published to date in the physical education literature about online assessment.

Available OAPs

In teacher education, four commercial products are currently used more than any of the others for assessment and accreditation purposes: Live Text, Chalk and Wire, Task Stream, and TK20 (table 1). These share common functions within their products, but it is important for current and potential users to decide which OAP best meets their specific accreditation and assessment needs. Blackboard has recently added an assessment focus to its course management tools, which hold the majority of the market in higher education (Villano, 2007). It is not clear yet whether Blackboard's assessment tools and focus will be as strong as the other established assessment products.

Plan Before Deploying the OAP

An OAP is essentially an electronic portfolio (e-portfolio) assessment system. The move to integrate a program assessment process within an OAP provides an ideal opportunity to take a good hard look at what is currently being done in terms of assessment of program processes and outcomes. Key personnel should be consulted at this initial stage. Programs should bring in lead faculty and program administrators (including accreditation coordinators), as well as institutional research personnel (if available) to frankly discuss what should be done. As a group, programs should discuss what does and does not work, which elements should be kept, and what to add or improve to make the most of the assessment process. This is also an ideal time to address issues of faculty professional development. At many institutions, faculty members are content experts, not assessment experts. The faculty may need some training in the area of rubrics, performance tasks, and the merits of formative and summative assessment (Everhart, 2006). Without advance planning, the deployment of an OAP is useless, especially if the program faculty have not decided what needs to be a part of the assessment system. Once the program and its faculty understand exactly what needs to be assessed and why, then the next step is to investigate which commercial assessment product best meets the program needs. The journal Campus Technology recently published an issue that reviewed various commercial assessment products and described the perspectives of some of their clients to ascertain the strengths and weaknesses of some of these products (Villano, 2007). It is the responsibility of the programs, units, and institutions to decide which company's products are best suited for their specific assessment and accreditation needs (table 2).

Accreditation, Assessment Systems, and E-portfolios

Wilson and Youngs (2005) noted that accreditation is intended to convince the public and other institutions of the soundness and rigor of academic programs. Although the accreditation process is challenging, it is probable that it
Table 2. Possible Functions of Online Assessment Products

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<thead>
<tr>
<th>Type of Function</th>
<th>Specific Capability of Online Assessment Product</th>
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<tbody>
<tr>
<td>E-portfolio Creation</td>
<td>Users create portfolios with artifacts linked to assessment capabilities.</td>
</tr>
<tr>
<td>Aligned Standards</td>
<td>Portfolios are aligned with professional standards.</td>
</tr>
<tr>
<td>Rubrics Linked</td>
<td>Rubrics are created and linked with artifacts, assessments, and standards.</td>
</tr>
<tr>
<td>Performance Levels</td>
<td>Multilayered performance levels are linked with rubrics and standards.</td>
</tr>
<tr>
<td>Survey Creation</td>
<td>Enables the development of surveys to assist with demographic data collection.</td>
</tr>
<tr>
<td>Dispositional Surveys</td>
<td>Attitudes and links to dispositional conclusions are compiled in reports.</td>
</tr>
<tr>
<td>Data Aggregation</td>
<td>Data are collected, aggregated, disaggregated, and analyzed statistically.</td>
</tr>
<tr>
<td>Reliability</td>
<td>Reliability of assessments can be measured.</td>
</tr>
<tr>
<td>Statistical Guides</td>
<td>Users can make sense of statistics for report purposes.</td>
</tr>
<tr>
<td>Report Generation</td>
<td>A variety of tables and graphs for report writing can be generated from statistical analyses.</td>
</tr>
<tr>
<td>Compatibility</td>
<td>Capability exists to import data from other software platforms.</td>
</tr>
<tr>
<td>Assess the Assessment</td>
<td>Questions are linked to help users prepare for reviewers by asking pertinent questions that link to the areas of the report that need improvement.</td>
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can be simplified by using appropriate technology for data collection, evidence demonstration, and the generation of reports once an assessment structure is in place.

Assessment not only provides a measure of student learning, it also helps faculty to recognize areas for programmatic improvement and facilitate appropriate curricular changes (Vaughn & Everhart, 2005). For example, if physical education teaching majors are consistently failing to meet a competency that PETE professionals identify as key to success in the field, then the faculty within that program must determine the source of this deficiency and how it can be corrected. Online assessment products can enhance this process.

The e-portfolio is the ideal vehicle for collecting these data (Zeichner & Wray, 2001). Electronic portfolio systems range from the simple “common tools” approach, which employs a readily available software application such as an Excel or PowerPoint system, to a proprietary commercial or home-grown database structure (Abrami & Barrett, 2005; Ahn, 2004; Lorenzo & Ittleson, 2005; Williams, Davis, Metcalf, & Covington, 2003). The programs and units that have implemented commercial products are able to see their data immediately, in aggregated or disaggregated form, once reviewers of student artifacts have submitted their assessments of the student work. That is, the commercial products automatically enter data into built-in databases that are aligned with professional standards and are ready for review immediately when faculty and other reviewers have viewed and evaluated items within the products.

Tables of Contents, Standards, and Rubrics

Many of the primary OAPs are structured in a similar manner, arranging the assessment systems to align student work with standards and rubrics for assessment purposes. However, whatever product is selected, a starting point for creating the OAP typically revolves around standards, rubrics, and a home page or table of contents (TOC). Below is a guide to help programs and units to start such a process.

Starting the Process. First, start with standards. These are the things that programs and units will use to attempt to prove that students have mastered the required competencies. Standards generally are imposed by the accrediting agency; the school, college, or department; or the state, and they are not flexible. Students may also be required to meet several different sets of standards (e.g., school, state, and program standards).

Next, program faculty should think about the performance tasks that students can use to demonstrate their competency in the previously mentioned standards. These items are typically organized as a TOC in the e-portfolio. Students may choose to have a TOC that reflects the entire body of work they are expected to complete in the program, or they may want to create their own, which is more cumbersome.

Third, think about the methods that are to be used to determine whether or not each student’s performance meets the desired performance level (i.e., the standard). This is the rubric. Rubrics may have more than one criterion (dimension) or aspect of work to be viewed. All reporting data are pulled from the assessment (rubric), so the more detailed the rubric (criteria), the more specific the data that can be learned about student performance. A formula rubric can also be created in order to combine individual criteria from separate rubrics into a new rubric (Everhart, 2006).

Programs may begin to develop the system with a TOC designed around items that faculty know students will cre-
ate during the first semester of the product’s use, and may create additional TOCs as needed. Tables of contents may be designed around individual courses or a set of standards, or they may give a comprehensive view of a specific program (figure 1). Some programs may instead choose to build the TOC around the six-to-eight common assessments required by NASPE/NCATE for the report. Students may submit individual areas of a TOC for assessment or the entire portfolio. Rubrics may be attached to the entire portfolio (which may be useful for a summative assessment of students’ work or when using the portfolio as an entry to subsequent “gates” in the program), or they may be attached to individual elements of a portfolio (Everhart, 2006).

Program faculty should think about the work that they wish to collect from students through an e-portfolio. It is simple to add items later that are not student-produced, but are valuable in terms of assessment. These nonartifact items may include checklists, test scores, grades, and affidavits. These may be entered as manual assessments, in which a student’s performance is measured against an established rubric but is not actually present as an artifact (as when observations of student teaching are recorded and assessed), or as student data entered but not manually assessed, such as grade point average or Praxis II scores (Everhart, 2006).

Assessing Student Work. With an OAP, faculty will typically receive an email notifying them that students have submitted work to be assessed. The faculty would then click on the embedded link within the email and log on to the OAP site. Once there, a list of student names would appear so that the faculty would know which students submitted work to be assessed. The faculty member would then click on the name of the student whose work is to be assessed, and the work and rubric would appear on the computer screen (figure 2). Once the instructor has assessed the student’s work and left appropriate feedback, the student would receive instant information on the performance. Performance data would then be available for aggregation and disaggregation according to the demographic needs of the program (figure 3).

Not all products are the same, but the process is structured in a similar manner with a few minor differences in appearance and functions. Once the work and data are collected and stored, reports can be generated with the push of a few keys. Some products offer more statistical tools and guidance for making sense of the results to assist programs in determin-
ing how the program can be improved. For example, it is possible to measure the reliability of assessments within the process as well (figure 4). However, as previously mentioned, programs should investigate to determine which products best meet their assessment and accreditation needs. It is clear that the use of an OAP makes the development and maintenance of a program-report process much easier and more efficient than ever before.

Potential Costs of Services and Tools

The typical cost for securing the services of an OAP usually depends on the number of students or others who will use the individual portfolios or assessment tools. Of the major companies listed in this paper, the cost per student ranges from $70 to $100 for an entire academic career of four or five years, depending on the total amount of student use. It is possible to pay a yearly fee or fees for multiple years. The best deal for these products is the long-term option. In addition, an institutional fee for program set-up and training is typically required. This is often a one-time fee of $10,000, although one or two companies may make the training optional at a much lower rate. For more information on these prices, one can view each company’s web site and search for the sales section. Some web sites list specific costs, while others prefer potential users to call for prices. It is possible for academic programs, units, or institutions to shop around and find the company that best suits their needs and budget.

It is also possible to use what is called an “Open Source” assessment system, which is usually developed by the institution’s instructional technology (IT) staff. Some PETE programs, as well as other academic programs, use these systems and have been satisfied with the outcomes. If an instructor is considering this option, it is crucial to communicate with others who use these systems to find out whether the tools are satisfactory and can accomplish the same things as commercial products. It is also important to speak with IT personnel to find out how much labor and money would be needed to set up the system. Cal Easterling, director of Institutional Research and Planning at Oral Roberts University, had this to say about Open Source assessment tools:

We really like the [commercial assessment] system. It has the capability that we really needed that we couldn’t find with any other product.... It is really a good assessment measuring tool. We could not have done it without [the commercial product]. We could have tried, but it would not have been as great. [We tried another company] and they didn’t fulfill their promises. Of course there are all of these Open Source movements. They are very expensive. They say they are free, but you have to have your own IT department develop all of your stuff. It costs a lot of money to go ‘free.’ (Everhart, 2006)

Academic programs looking for possible solutions for their assessment and accreditation needs should investigate the functions of both commercial and noncommercial products, as well as the cost-effectiveness for their budgets. It is possible to find a suitable product to meet almost any budget.

References


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