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# Wikis as Platforms for Authentic Assessment

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**Wikis as Platforms for Authentic Assessment**

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*Abstract*: Calls for accountability focus attention on assessment of student learning. Authentic assessment involves evaluating student learning as students perform real world tasks. We present a four-stage conceptual framework for authentic assessment. We argue first that evaluation is a process rather than a static one-time event. Second, authentic assessment involves evaluating experiential learning. Third, multiple evaluators assess student work, including self-assessment or review by a public audience. Finally, authentic assessments offer more learner choice. Wikis, as user-friendly web spaces that support easy web authoring for individuals or for collaborative groups, provide a platform for both student learning and authentic assessment.

Keywords: assessment; student learning; technology and teaching

*The most important method of education...always has consisted of that in which the pupil was urged to actual performance*  (Albert Einstein, *Ideas and Opinions,* 1954/1994,  p. 65).

According to Mueller (2011), authentic assessment is "a form of assessment in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills" (**¶** 1). In this article we offer a conceptual model for considering authentic assessment as a component of college teaching.  Specifically, we focus on how wikis may be used to assess student learning authentically.  We include two examples from our teaching practice that demonstrate how wiki technology has been used to support the authentic assessment of learning.  One example outlines a collaborative classroom project from one graduate level course, and the other summarizes how individual wiki portfolios have been used to support a capstone assessment across a department.  Even though wikis are the platform of technology used in our examples, other forms of digital media or technologies may also provide platforms for evaluating students as they apply their learning to assignments.

Calls to assess student learning (*A Nation at Risk,* 1983) and attention to accountability over the past two decades continue to increase expectations for measuring outcomes of educational programs (King, 2000; McLendon, Hearn, & Deaton, 2006; Wingspread, 1993). The seminal work of Angelo and Cross (1993) and Banta (2002) created an initial framework for faculty members to use as they attempted to measure student progress, both in classes and in programs overall (Allan, 2004).  These early examples focused on planning, implementation, and improving and sustaining assessment practices.  In 2007,  Ewell and Boeke reported that 40 states had some form of student unit record data collection to monitor

student progress in higher education, yet this institutional level measurement does not disaggregate to aid in measuring individual student learning.  Thus, despite calls for assessing student learning, resistance remains.  Faculty opposition to assessment coalesces around issues of time, skill in assessment practices, and teaching philosophy (Lightner & Benander, 2010).  Even though Barr and Tagg (1995) argued for a change from a teaching paradigm to a learning paradigm almost two decades ago, we have not totally implemented what it means to move to a learning centered classroom.

The influx of technology into classroom teaching affords opportunities to create conditions for student learning and for assessment options (Scalise & Wilson, 2011).  Digital tools may provide opportunities for differentiated forms of assessments.  Not only can digital measures of student learning provide assessment tools, virtual mediums create new ways for students to showcase their work and to work collaboratively with others.  Wikis provide one platform for collaborative writing for students and a mechanism for faculty to assess student learning. Wikis are user-friendly web spaces that support easy web authoring for individuals or for collaborative or cooperative groups. As already noted, we are focusing is on how wikis can be used to assess student learning authentically.

We first review assessment practices in general so as to understand the background and evolution of student evaluation in higher education.  A specific focus on authentic assessment narrows the focus to assessing student learning as students are using real-life applications in their classroom practice. A review of uses of wikis highlights the evolution of this technology and provides classroom examples of how wikis may be used instructionally.  We present examples from our practice in order to show different forms of application and to illustrate how wikis can provide authentic assessments of student learning.  Finally, we offer suggestions for

faculty members to support the implementation of wikis into classroom teaching as a platform for assessment.

**Background of Assessment**

Assessment practices emerged on the heels of demands for more accountability for student learning (*A Nation at Risk,* 1983; Wingspread, 1993) and calls for a paradigm shift away from instructor-centered teaching to learner-centered experiences (Barr & Tagg, 1995).  The early literature on assessment reviewed ways in which faculty members could incorporate assessment techniques into their classrooms for both formative (Angelo & Cross, 1993) and summative purposes (Allan, 2004).  Accreditation bodies began to include demands for assessment of student learning as a requirement to receive institutional accreditation in the 1990s (Ewell, 2005).  However, Sorcinelli, Austin, Eddy, and Beach (2006) found that, even though assessment of student learning was identified as a key issue for faculty development, it was only minimally supported by teaching centers as a resource for faculty members. Thus, faculty members may lack institutional support for learning best practices for assessment.

In researching the tactics that the best teachers employ in college teaching, Bain (2004) determined that "outstanding teachers used assessment to help students learn, not just to rate and rank their efforts" (p. 151).  In his understanding, learning, versus performance, was the focus of measurement for faculty members to assess students. Ongoing reflection by both teachers and learners helps to provide formative assessment during the semester of what strategies are working, what needs tweaking, and what needs to be dropped (Bain, 2004).  Brookfield (2006) identified a set of characteristics of helpful assessment practices, and he argued for clarity, individualized evaluation, affirming responses, future-oriented connections, justifiable links to class topics, and suggestions for improvements (pp. 183-187). Such frameworks propel

assessment into the realm of holistic and continuous review of student learning rather than merely single evaluative snapshots occurring at the end of a course.

Moving assessment beyond individual courses to the program level often involves the use of outside experts, including those associated with accreditation visits (Stark & Lattuca, 1997).  Program reviews involve looking at assessment across courses and in a summative manner for program outcomes.  The increased pressure for college completion (Obama, 2009) places a spotlight on degree programs to understand how students are progressing. Putting together program level assessment requires faculty members to come to a consensus about course objectives and student learning outcomes and requires alignment of objectives and outcomes throughout the program of study (Allan, 2004; Blumberg, 2009).

The creation of a course curriculum or degree program has traditionally focused on covering a certain amount of course content with less regard for the final outcomes or assessments.  In contrast, using the concept of backward design encourages faculty members to focus on first identifying the end results, determining the metrics and evidence that will illustrate mastery of these goals and planning instruction and learning activities to engage students (Wiggins & McTighe, 2005).  The basic questions that guide the process of assessment in this instance include:

- What kinds of evidence do we need to find hallmarks of our goals, including that of understanding?

- What specific characteristics should we look for in student responses, products, or performances to determine the extent to which the desired results were achieved?

- Does the proposed evidence enable us to infer something about a student's

knowledge, skill, or understanding? (Wiggins & McTighe, 2005, p. 150)

Shifting to thinking like an assessor of learning embeds the notion of assessment throughout a course or degree program and includes a range of both formative and summative assessment points. Moving to authentic assessment showcases how learning is evidenced in practice. Class concepts are moved from theory to practice as students have an opportunity to apply their knowledge through real world applications.

**Defining Authentic Assessment**

Authentic assessments can take a wide range of forms, depending on the discipline and the task. The word "authentic" is rooted in the Greek words *auto- + -hentes. Auto* means "self" and *hentes* means "doer" or "being" or "worker." Here, authentic learning may become conflated with authentic assessment. What lies at the foundation of "authenticity" in learning is the notion that the individual is not only the learner, but also the doer. "Authentic," then, implies that the locus of control is on the individual. In this orientation, knowledge creation is constructive rather than reactive, active rather than passive (Van Duinen, 2005). Authentic learning involves active engagement in the learning process, whereas authentic assessment focuses on evaluating student work that puts knowledge to practice.

Authentic assessments ultimately shift the construction of knowledge to the student, often with a product that is a student creation. Authentic assessment, however, can also occur when learning is passive. In this case, the students' final projects involve an application of content to practice; but the acquisition of knowledge may have occurred in a passive format, such as a lecture. Comparisons of the level of student learning occurring when learning is passive versus active can contribute to the literature on the

scholarship of teaching, but that is not the focus of this manuscript.

When learning is designed for active student involvement, power dynamics in the classroom shift as faculty members give up a certain level of control over final products (Pratt, 2004). The learner becomes a self-doer and the process of authentic assessment connects the course content and learning goals with the acts of creating course products, performance, writing, problem solving, and/or publishing. The authenticity of assessment also derives from the potential to transfer the knowledge to "real-world" contexts in "out of school settings" (Darling-Hammond, Ancess, & Falk, 1995, p. 2). This process-oriented assessment forces the student to consider prior knowledge (course content), to apply this prior knowledge to create a learning product and to consider how this authentic experience may be incorporated into a long-range application (a professional portfolio or a workshop session, for example).

Examples of authentic assessment in higher education include professional portfolios, case studies, debates, student created videos, essays, practica, internships, student teaching experiences, and scientific lab assignments, to name a few. One characteristic of these assessments is that the student products duplicate real-world and discipline-specific tasks and processes (Mueller, 2011). Whereas traditional assessment in education focused on knowledge accumulation and recall (i.e., multiple choice tests and objective quizzes), authentic assessments concentrate on the application of knowledge and skills through performance-based tasks. Such tasks, to be authentic, hold significance both as an assessment instrument and as a connection to the professional world beyond the classroom (Newmann & Wehlage, 1993). The connection to the real world might take the form of a platform for replicating professional skills (such as

designing a website) or as a platform that invites public input (such as a public debate or discourse) or as a cumulative evaluative process (such as a portfolio). This variety of forms highlights the focus on the process of application versus a predictable or foregone conclusion of an acceptable outcome. Such hands-on assessments of real world tasks encourage students to be engaged in the creation of the product, but the learning process leading up to this point may actually be passive or active.

The emphasis on holistic learning that matters beyond the classroom aligns with Barr and Tagg's (1995) Learning Paradigm model of teaching and learning (Newmann & Wahledge, 1993). Barr and Tagg (1995) argued that the Instruction Paradigm is atomistic whereas the Learning Paradigm is holistic. The traditional faculty-centered Instruction Paradigm relies upon "covering material," "end of course assessments," and "private assessment;" but the Learning Paradigm lauds "specified learning results," "pre/during/post assessments," and "external evaluations of learning," including "public assessment" (p.16). Even though Barr and Tagg (1995) argued for more active than passive learning, their paradigm shift also focuses on forms of assessment because authentic assessments based on real-world applications versus static, traditional forms of testing and evaluations are also a part of changes to a learning paradigm.

According to Lave and Wenger (1991), knowledge construction is a cultural act gained through "legitimate peripheral participation" of the learners (p. 14). These forms of situated cognition are based on social relationships in communities of practice and experiential learning (Lave & Wegner, 1991). Authentic assessment can provide a nexus for bridging a learner's social context to the community of practice in the field. One approach to building such bridges is providing opportunities for student choice in the assessment product. Here, a faculty member might provide a range of options from which students may choose, both in

8

discipline-specific content and in the output of the final product. Overall, when compared to traditional assessment practices like factual midterms and final exams, authentic assessment potentially provides a platform for student centered knowledge construction, a platform that can be contextualized based on students' needs, interests, and goals. This argument is not to say that authentic assessment should replace traditional assessments completely, rather that authentic assessments can add opportunities for engaged and personal learning experiences in the college classroom.

**Conceptual Model**

Based on a review of the literature and a consideration of the types of authentic assessment that occur across disciplines, we have grouped the characteristics of authentic assessment into four main sub-headings: evaluation as process (Mueller, 2011), experiential evaluation (MacFarlane, Markwell, & Date-Huxtable, 2006), multiple evaluators (Bresciani et al., 2009), and learner choice (Taras, 2010). All of these constructs contribute to making the assessment authentic, but the use of any one of the areas also suffices for the making of a real-world evaluation opportunity that is learner centered. We have created a concept map for authentic assessment (see Figure 1) in order to illustrate these characteristics.

<div align="center">Insert Figure 1 About Here</div>

First, authentic assessments tend to uphold evaluation as an ongoing process rather than as a static event (Campbell, 2000). Second, authentic assessment tends to be rooted in student experience and task or performance based learning (Campbell, 2000; Mueller, 2011; Wiggins, 1990). Third, authentic assessment has the potential to be viewed or assessed by multiple evaluators, including self-assessment from the student or assessment by the instructor and also a potential real-world assessor such as a future employer (Darling-Hammond et al., 1995;

Rhodes, 2011; Wiggins, 1990). Finally, authentic assessments tend to offer more opportunities for students to select their medium, content, or method for learning projects, thereby making the process more meaningful and contextually appropriate (Taras, 2010). Thus, depending on parameters set by the instructor, authentic assessment could enable students "to choose the terms of their own inquiry" (Rennert-Ariev, 2005, p. 8).

This conceptual model serves as a lens that a faculty member or a director of a teaching and learning center might use to create authentic forms of assessment. For instance, faculty members may begin by looking at their goals for evaluation and determine what types of experiential options for assessment might align with the course objectives. The structure of the course assignment could allow for student choice and might be open to multiple evaluators, which might include more formal assessment by the instructor or informal feedback from those in practice such as potential employers or the public. Faculty developers can use the framework to structure training sessions that can support faculty members as they explore new options to evaluate students using authentic assessment and as they design program learning outcomes.

**Wikis as Instructional Tools**

Authentic assessment can be supported in a number of formats, using both low-tech and high-tech options. Wikis are just one of the many potential platforms that educators can utilize to support authentic assessment. Invented in 1995 by computer programmer Ward Cunningham, wiki technology was developed as a platform that allowed for ease of collaboration in one web space. For example, wikis provide a web-based platform where individuals can author and share writing and information in the same online space without any comprehensive or prerequisite technological skills such as computer coding or programming.

As a learning tool, wikis are flexible and can provide a range of approaches for project production by students. In a course on Children's Literature, for example, one student might choose to create a digital children's book while another student might choose to create a resource page for the local school district or library system. Or, in a biology class, one group might choose to use the wiki to showcase field research on local vegetation and animal life (containing images, videos, or podcasts) while another group might choose to build an argument for or against stem cell research on the wiki platform. It is, of course, faculty members who decide how much freedom and flexibility to offer in the assessment activities within a course. Certainly, some units of study will require much more targeted content coverage and therefore will afford less flexibility.

The wiki technology provides some of the same features that a faculty member might find in a course management system like Blackboard or in a blogging platform like Wordpress or in Google Documents: the ability to share files, the ability to have multiple authors and editors on one page, and the ability to embed multimedia. Yet, the wiki platform is simple and malleable enough for easy implementation and customization using technology that both students and faculty members can shape to fit their purposes. On a practical level, wikis are accessed using a browser, and they take advantage of Web 2.0 technologies that allows for their creation in the cloud versus being located on the hard drive of a computer. A tool bar on the wiki provides access to the individual pages that students create. Editing the page includes the use of user-friendly options to include various forms of media such as pictures and video, provides an embedding option for YouTube videos or individually created slideshows, and has general text editing capability for fonts, bolding, and graphics.

One distinguishing characteristic of wikis is the ease with which the tool supports

collaboration.  Thus, wikis can be used to support group work and collaborative learning.

Another feature is that wikis can have different privacy settings established.  The most private

option requires an invitation to participate (including editing privileges) and view the site and is

limited to a select group of members. The most open choice allows for public access and editing

abilities, such as with the features available on Wikipedia.  The ability to publish to the web and

to collaborate easily are elements of the wiki platform that give it the potential for authentic

assessment. Characteristics of the wiki platform include:

- The ability for more than one person to author and/or edit a page,

- The creation of linked and interconnected pages usually organized topically,

- The freedom to change, grow, and evolve over time,

- The ability to track changes or view history (Duffy & Bruns, 2006).

There are several wiki providers, and many offer free accounts.  Some of the major providers

include Wikispaces, MediaWiki, and Google Sites. Some learning management systems, like

Blackboard, also have a wiki option built into the course options. We now outline wikis for both

individual and collaborative assessments, using two specific examples from our classroom

teaching.

Wikis for Individual Assessment

Individual assessments supported by wikis include professional portfolios, individually authored

websites and reference pages, media rich project presentations, and reflective journals (or any

other form of individually authored writing for web publication).  The allowance for incremental

additions to the wiki and for sharing files with an outside audience makes the platform ideal for

supporting electronic professional portfolios.  The wider audience available through the use of

wikis underscores the effectiveness of this platform to support multiple evaluators including

potential future employers.

One example of wikis for individual assessment includes student e-folios (Rhodes, 2011). These portfolios are often used for assessing pre-service teachers and documenting acquired competencies and dispositions. Electronic teaching portfolios are also used by faculty members to document information required for promotion and tenure (Seldin, 2004). Wikis provide an updated technological option for traditional formats of teaching portfolios.

An example from our institution is the use of a wiki-based electronic portfolio (eFolio) as part of student course and program assessment for students enrolled in the teacher preparation, special education, and K-12 administration degree programs. Pre-service teachers create their eFolios in their Educational Technology course. In this course, students explore and become comfortable with a technology; and they create the framework for their professional portfolio. As students progress through their degree program, they can add to or edit their eFolio. Ultimately, students can supply a direct link to their wiki-based eFolio to potential employers.

*Evaluation as Process*. The pre-service teacher eFolio allows students to document their foundational understanding, teaching artifacts, and professional reflections over time rather than at an isolated or static point in time. After the initial creation of the eFolio, they can add or edit information on the site during their remaining time in the program. Students are encouraged to pull in artifacts from their student teaching, observations, and individual or collaborative assignments including lesson plans and self-reflections. In addition to supporting an evaluative process in a particular course, the eFolio often serves as the professional portfolio when students are applying for teaching positions.

*Experiential Evaluation*. The wiki-based eFolio allows students to easily document and upload artifacts and examples from their practice in the field and from their various class

projects.  As students explore their own approaches to teaching pedagogy, they can use the wiki

site to showcase their emerging development through documentation of their learning. For

example, one pre-service teacher in our educational technology course included screenshots of

her students' original poems.  The student-teacher was able to link in artifacts that provided a

tangible example of the student product she facilitated in her student teaching.  The wiki

provided a platform for her to share an image or file easily and also to reflect upon the

significance of such artifacts to her own teaching philosophy.

*Multiple Evaluators*. Pre-service teachers receive their first grade for the eFolio in their

Educational Technology course.  In this course, they are evaluated not only on the creation of the

eFolio but also on evidence of meeting the criteria for the National Education Technology

Standards for teachers.  Students then progress through the remaining course work and are

evaluated by other faculty on six professional competencies.  Most items are evaluated before

they are added into the eFolio, so students have the ability to revisit, rethink, and improve

products from their initial evaluation to uploading them into the wiki.  Finally, many of our

students make their eFolios available to potential employers, the final evaluators.

*Learner Choice*. Students are required to produce artifacts and reflections that indicate

competency in six professional areas.  However, they have a great deal of choice in the design

and layout of the eFolio, in the type of files and media included, and in the chosen artifacts and

lesson plans.  Each pre-service eFolio, for example, includes a Philosophy of Teaching and

Learning page, a Classroom Management Knowledge and Skills page, and a Working with

Diverse Students page, to name a few.  However, students have the ability to choose which

artifacts and examples best convey competency for any given standard. Students also have choice

in designing of their eFolio, and no two look exactly alike.  Students make them their own and

choose what to include , how to include it, and how best to display the information. An example

of a student eFolio may be found at laurabagbeye-folio.wmwikis.net. (This eFolio is shared with

permission from the student).

Wikis for Cooperation, Collaboration, and Group Assessment

Even though the wiki platform can easily support individual authentic assessments, what sets this

technology apart from other similar technologies, such as blogs or website builders, is the ability

to collaborate and co-author easily with other students located not only within the institution but

also at other institutions (Barton & Cummings, 2008). Students can co-construct and co-author

either asynchronously or synchronously and either face-to-face or at a distance. Thus, the

technology supports individual schedules and circumstances, and the final product is the learner's

choice.

     While cooperation and collaboration both involve student work in groups, a distinction

must be made between these two strands of learning. On the one hand, cooperative learning is

made up of learning activities that must be managed through a division of labor for group work

(Nilson, 2010). In cooperative projects, students must manage the logistics of divvying up the

workload as well as pulling the pieces back together. The learning aspect of cooperative learning,

though, may very well still be individualistic (Dillenbourg, Baker, Balye, & O'Malley, 1996).

Collaborative learning, on the other hand, involves the process of students actively learning

together through shared practice, negotiation, discussion, co-authoring, and perhaps co-

presentation (Stahl, Koschmann, & Suthers, 2006). Collaboration in the creation of the wiki

engages students in an application of their learning through the process of co-authoring, co-

editing, and co-publishing course related content; and it also simulates workplace experiences

that increasingly rely on teamwork.

The fact that several authors are present in the formation of the wiki site creates a built in set of multiple evaluators. The students provide feedback and critique during the process, creating a first-stage of evaluation of the project. The on-going creation of the wiki and subsequent iterations also emphasize evaluation as process because the formative stage of evaluation occurs as the students create the wiki site. To illustrate this application, the following example draws from a class created wiki site at our institution. The class topic was Community College Administration, and the group project involved creating a wiki site to aid in professional development in the community college sector. The site was made publically available upon completion of the course and may be accessed at communitycollegeoverview.wmwikis.net. .

*Evaluation as Process.* The goal of this course assignment was to create a wiki site that community college leaders could use in acclimating new hires to their new work context because many of them may only have experience in the business world or in four-year institutions and not at two-year colleges. Seven different groups were assigned to cover a range of topics that included the history of the community college, organization and governance structures, leadership, academic instruction, students, outreach, and future directions. Wikis have a feature that enables instructors or evaluators to see the progression of page creation and content building. This history option allows for evaluation of the evolution of the final page and creates an opportunity for the instructor to view the key author of each edit to the page. Thus, evaluation occurs throughout the development phase, and feedback to student groups is possible using the discussion forum on the wiki site.

*Experiential Evaluation.* Students gained knowledge about the community college sector through readings, guest speakers, interviews with community college stakeholders, and the work for their individual research projects. The development of their wiki page allowed for a

mechanism to link this newly acquired knowledge to practice. Because the students knew that the site would ultimately have a public audience, they could readily see the links to practice.

*Multiple Evaluators.* As noted above, the first sources of evaluation for the site were the students themselves. The site was initially established as a members-only private site, allowing the groups to self-assess their work. The seven groups presented their final pages during a formal presentation at the conclusion of the course and received additional feedback from the class at this time and from the instructor. Evaluation of the final product also occurred when the wiki went public. Letters announcing the availability of the wiki site were sent to all community college presidents in the state. Viewers were able to post comments and reactions directly to the wiki in the discussion forum and could email the instructor with comments as well.

*Learner Choice.* The project was designed to allow student groups the final choice in how they designed their topical page on the wiki. Initially, students chafed at this freedom and requested that a template design be instituted for page formatting. They desired agreement on font type, page orientation, and titling. Instead, they were given a blank slate upon which they could design unique pages within the site. This option allowed for diversity in design as well as alignment of topical areas to the wiki features of linking, video uploads, and automation. Visually, the diversity of page design allowed for appeal to a variety of viewer preferences.

**Getting Started**

The following framework can support faculty members or directors of teaching and learning centers as they begin to use wikis for the authentic assessment of student learning. It is important to begin with the end in mind. Instructional leaders must ask themselves what the desired learning outcomes are. How will evaluation of student work occur? As with other forms of assessment (Goodfellow & Lea, 2005; Wolfe, 2010), it is helpful to consider three components in

inserting wikis into courses or training modules:  planning, facilitating, and evaluating.

*Planning*.  In planning to use wikis, it is important to pick the wiki platform.  Your institution might support only one format, or it might have additional options available.  The instructor must decide some of the ground rules for the site.  For example, will there be a template for the pages with required sections on each page?  Will the site be private or public?  Will the project and assessment be individual or collaborative?  At what stages will evaluation of student work occur?

*Facilitating*.  Not all students will be familiar with how to edit or post on a wiki.  It is important to allow up-front review time at the beginning of a course.  Students always come into learning situations with different orientations and experiences; thus some will desire an opportunity to play with the various options and tools, others want to view on-line tutorials, and some will want to read about how to use wikis.  As with all learning experiences, it is important to recognize the diversity of learning approaches to new material (Kolb, 1984); and it is important for faculty members to be clear on how the course materials and learning experiences will link with the material posted on the wiki site.

*Evaluating*.  Authentic assessment of the wiki site will occur at multiple points.  Some faculty members may wish to build in checkpoints during the wiki construction process.  Those who allow for greater student choice might have students generate their own customized project rubrics aligned with the course content and learning goals.  (Rubistar and iRubric are two websites that support free rubric creation).  As noted above, for some programs assessment is ongoing as with electronic portfolios that are created to assess program learning outcomes.  The wiki technology allows for formative assessment during the creation process and ultimately for public evaluation when the site is opened for wider audience access.  The evaluation of the

projects allows students an opportunity to apply their learning of theory to practice and creates

authentic assessment of learning.

*Summary*.  This article highlights how wikis can provide a forum for authentic

assessment.  The examples of individual and collaborative projects show a range of applications

of the technology to learning situations.  The following section provides a listing of additional

public wikis that show a range of examples as well.

**Examples of Authentic Wikis**

- Climate Lab—Whitman College

  http://climatelab.org/Projects/Whitman_College

- Educational Wikis- Various K-12 Examples

  http://educationalwikis.wikispaces.com/Examples+of+educational+wikis

- Global Textbook Project—University of Georgia

  http://globaltext.terry.uga.edu/

- Greek Tragedy—Skidmore College

  https://academics.skidmore.edu/wikis/Greek_Tragedy/index.php/Main_Page

- Social Justice Wiki—Columbia University

  http://socialjustice.ccnmtl.columbia.edu/index.php/About

- Teaching Physics—Howard Hughes Medical Institute

  http://www.hhmi.org/coolscience/resources/SPT--FullRecord.php?ResourceId=173

**Discussion and Conclusion**

The role of assessments in higher education for measuring student learning has been amplified by

calls for increased accountability and data-driven decision-making (McLendon et al., 2006;

Wingspread, 1993).  Research (Bain, 2004) shows that using assessments as tools for measuring

student learning is one of the characteristics of "good" college teachers. Barr and Tagg (1995) proposed a shift from the Instruction Paradigm to the Learning Paradigm to include such shifts in assessment practices as moving from a final course assessment toward multiple (pre/during/and post) assessments, moving from one evaluator toward multiple evaluators, and moving from private assessment toward public assessment (p. 16). This shift to student-centered teaching has not been fully realized in many college classrooms (Sorcinelli et al., 2006). The use of authentic assessment, however, supports this paradigm shift and encourages engaging students in the creation of more applied assignments for evaluation.

We argue that implementing authentic assessment practices and activities is one strategy for moving toward a student-based learning model of college teaching (Newmann & Wehlage, 1993). Digital and web-based platforms can provide opportunities for creating assessments that move beyond the static one-time objective assessment toward a more process-oriented authentic assessment. Further, we have suggested that wiki technology provides an easy-to-use, web-based platform for supporting a wide array of authentic assessments in college classrooms.

Moving towards authentic assessment provides an opportunity for deeper analysis and evaluation of student learning. Providing an opportunity for students to put into practice the knowledge they are acquiring offers faculty members a means for authentic assessment. Wikis, as an example of Web 2.0 technology, offers a flexible platform for posting student work. Thus, incorporating wikis as a teaching strategy accomplishes multiple goals—moving more fully toward a learning paradigm and providing a means for authentic assessment.

A demand for accountability and assessment of student learning requires movement away from static forms of assessment. The dynamic nature of wikis in assignments creates evaluation as process and provides faculty members a way to demonstrate improvements in student learning

and for students to have a learning product to share with potential employers.  Students gain experience in translating their classroom knowledge into practical application.  Experiential evaluation emanating from the final wiki creation provides students exposure to the type of critiques they will face in the workplace. Getting used to multiple evaluators viewing their work aids students in preparing for and understanding that there are often multiple audiences and stakeholders involved with work in the real world.

It is important to consider, however, how faculty members become adept at both using wikis and crafting assessment formats to document student learning.  Individual faculty members may use self-directed learning to figure out the technology of wikis; the examples highlighted in this article provide good references and show a range of applications of the technology in different disciplines.  Faculty development centers can sponsor training sessions on how to use wikis or form faculty learning communities to support faculty learning of the technology. Teaching and learning conferences increasingly offer sessions on using wikis as a teaching strategy as well. The benefits of using wikis for authentic assessment include the potential for improvements in student learning, the opportunity for faculty members to be reflective about their teaching, the enhancement of student-centered learning, and the robust assessment of classroom learning.  Ultimately, linking real-life learning to classroom knowledge and authentically evaluating this experience addresses the public demand for accountability.

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