

## MT Engage Literature Review

### ENGAGEMENT

MTSU is dedicated to engaged teaching and learning. In the University's "Building on the Blueprint for Excellence," the University's 2007-2017 Academic Master Plan states:

MTSU commits itself to adapting learning and teaching approaches and technologies to promote active engagement. The University further recognizes the close ties between student-centered classroom instruction and co-curricular activities that engage students and allow them to share the responsibility for their own education (p. 17).

Many scholars, however, use the terms engagement, student engagement, academic engagement, engaged learning, student involvement, and academic involvement interchangeably—sometimes even within one collection (Christenson, Reschly, & Wylie, 2012). In 2005, Bowen addressed the lack of a standardized operational definition and identified four different types of student engagement: 1) engagement with the learning process (active learning), 2) engagement with the object of study (experiential learning), 3) engagement with contexts (multidisciplinary learning), and 4) engagement with social and civic concepts (service learning). Deneen (2010) also noted the lack of consensus referencing numerous academic articles from the 1990s and 2000s, calling the definition "complex and broad."

Kuh (2009) traces the historical use of "engagement" back to the 1930s and details the major evolutions of the term over time. One such evolution was a shift towards a student-focused definition of engagement. Astin (1984) described student involvement as "the quality and quantity of physical and psychological energy that students invest in the college experience" (p. 307).

Other definitions place equal responsibility on both the student and the institution. The National Survey of Student Engagement (NSSE) instrument that is often used as a standard measure of student engagement at MTSU (and throughout the US and Canada) defines student engagement as the amount of time and effort exerted by students and also the *institutions'* efforts to cultivate this type of learning (<http://nsse.indiana.edu/html/about.cfm>). The NSSE defines six research-based "high impact practices" (also called HIPS or "productive learning activities") that institutions can employ to foster student engagement (National Survey of Student Engagement, 2015):

- Learning community or some other formal program where groups of students take two or more classes together
- Courses that included a community-based project (service-learning)
- Work with a faculty member on a research project
- Internship, co-op, field experience, student teaching, or clinical placement
- Study abroad
- Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)

Similarly, the American Association of Colleges and Universities (AAC&U) uses the term “High Impact Education Practices” (HIEPs) synonymously with student engagement. The AAC&U cites George Kuh’s 2008 list of HIEPs which lists the following productive learning activities:

- First-year Seminars and Experiences
- Common Intellectual Experiences
- Learning Communities
- Writing-Intensive Courses
- Undergraduate Research
- Diversity/Global Learning
- Service Learning, Community Based Learning
- Internships
- Capstone Courses and Projects

Recognizing that students’ academic engagement involves both physical and psychological involvement in their learning, and the institutional opportunities to participate in HIEPs/HIEPS, the MT Engage committee members chose to define academic engagement as:

**A student’s active learning experiences as demonstrated through quality of effort, physical and psychological involvement, and participation in productive learning activities.**

This definition is an amalgam of the student-centered approach from Bowen, the institution-centered approach from NSSE and AAC&U, and stresses the importance of both physical and psychological effort as expressed by Astin. By using the productive learning activities provided by NSSE and Kuh, MT Engage students will become more personally involved in their learning and have opportunities to exercise reflective and integrative thinking.

Miller & Butler (2011) provide a nice overview of studies that link academic engagement to student success and outcomes. Engagement has been shown to have a positive impact on students’ cognitive abilities, knowledge acquisition and transfer, critical thinking skills, and better grades (p. 18-19).

#### REFLECTIVE AND INTEGRATIVE THINKING

In order to reinforce the engagement of high impact educational practices, the MT Engage program challenges students to reflect on their learning experiences and make connections within and beyond the classroom.

Reflection has long been an underlying element of educational theory and practice. Dewey (1910) described reflection as the “active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends” (p. 6). Rogers (2002) further explicates Dewey’s definition of reflection and contextualizes it within the foundations and standards of higher education.

Mezirow (1990) said that critical self-reflection means “reassessing the way we have posed problems and reassessing our own orientation to perceiving, knowing, believing, feeling, and acting” (p. 11) and “challenging the validity of presuppositions in prior learning” (p. 12). Critical reflection done well is an “evidence-based examination of the sources and gaps in knowledge and practice” and is an “integrative, analytical, capacity building process rather than [...] a superficial exercise in naval-gazing” (Ash &

Clayton, 2009, p. 28). For MT Engage, reflection is a metacognitive act in which students think about their own learning, not merely a summary or recap of the learning exercise.

Moon (2001) cites research that demonstrates four ways that reflection can contribute to student learning. According to Moon, reflection slows down learning so that students may think and process; it enables learners to develop ownership of their learning; it encourages metacognition; and it encourages students to challenge their own learning (p. 7).

MT Engage uses Mezirow's concept of metacognition (p. 8) in conjunction with the AAC&U Value Rubric to define critical reflection as:

**The meta-cognitive act through which a student reflects on a learning experience and evaluates both new information and the frames of reference through which the information acquires meaning.**

A desired result of students' critical reflection is integrated learning. The AAC&U and the Carnegie Foundation for the Advancement of Teaching's joint Statement on Integrative Learning (2004) states that "Fostering students' abilities to integrate learning—across courses, over time, and between campus and community life—is one of the most important goals and challenges of higher education." Huber, Hutchings, and Gale (2005) cite the AAC&U's Statement on Integrative Learning which describes integrated learning as the ability to make connections within a major, between fields, between curriculum, co-curriculum, or between academic knowledge or practice (p. 4).

MT Engage defines integrative learning using The Association of American Colleges & Universities (2009) definition:

**Integrative and applied learning is an understanding and a disposition that a student builds across the curriculum and co-curriculum, from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situations within and beyond the campus.**

AAC&U's VALUE (Valid Assessment of Learning in Undergraduate Education) rubric for Integrative Thinking outlines a framework by which universities can study integrative learning and share evidence of its success using a common vocabulary and methodology. The AAC&U published themed issues of *Peer Review* on integrative learning in Summer 2005 and again in Fall2014/Winter2015 [See: <https://www.aacu.org/peerreview>] with articles covering a variety of integrative learning projects and the applied use of the AAC&U VALUE rubrics.

MT Engage recognizes the significance of providing engagement opportunities within and beyond-the-classroom and the critical role reflection plays to providing a truly meaningful experience in integrative learning.

## EPORTFOLIOS

### **ePortfolios and Student Learning**

Evidence of students' integrative thinking and reflection can be captured in the form of electronic portfolio (or ePortfolio) artifacts and made available for assessment. The use of ePortfolios in higher education has been around since the mid-1980s and came to be prominent tools for reflection and assessment in the mid-1990s (Lorenzo & Ittelton, 2005, p. 3).

Yancey stresses that personal reflection is the “the key portfolio piece” to foster student learning (2001, p. 19). This sentiment is echoed in later research that ties reflective ePortfolios to deep learning (Eynon, Gambino, & Török, 2014a). Eynon, et al., cite data from the Catalyst for Change project (<http://c2l.mcnrc.org/>) that correlates ePortfolio initiatives to student success, reflection and deep learning, and institutional change.

Eynon, Gambino, and Török (2014b) note that a review of practices on the Catalyst for Change web site reveals different approaches to reflection in the ePortfolio, including: Reflection that connects experiences within a course; Reflection that connects experiences across courses, semesters, and disciplines; and, Reflection that builds connection between academic, co-curricular and lived experiences (p. 4). MT Engage allows for faculty to identify the type of reflection approaches they would like to apply as they help students make meaningful connections between different types of experiences.

### **ePortfolios and Assessment**

The use of ePortfolios to assess reflective and integrative thinking is summarized nicely in works by Eynon, Gambino, and Török (2014a). Peet, Reynolds-Keefer, and Gurin (2011) assessed ePortfolios using the AAC&U Integrative Learning VALUE Rubric to find statistically significant gains for six dimensions of integrative learning. Richards-Schuster (et al., 2014) used ePortfolios to measure integrative learning within a specific academic program.

Furthermore, this connection between ePortfolios and reflective and integrative thinking is also on display in a recent issue of *Peer Review*. The Winter 2014 themed issue was devoted to articles on “E-Portfolios: For Reflection, Learning, and Assessment” [See: <https://www.AAC&U.org/peerreview/2014/winter>]. Cambridge, Cambridge, and Yancey (2009) also devoted whole sections of their *Electronic Portfolios 2.0* monograph to the subjects of reflection and integrative learning (2009).

The use of ePortfolios for learning assessment has become so ubiquitous that scholars have formed their own academic association. The Association for Authentic, Experiential and Evidence-Based Learning (AAEEBL) hosts national and regional conferences and ePortfolio forums [See: <http://www.aaeebl.org/>]. AAEEBL also hosts its own peer-reviewed journal dedicated to the student of ePortfolios: *The International Journal of ePortfolio* [See: <http://www.theijep.com/>].

Catalysts for Change, AAEEBL, and EDUCAUSE, AAC&U all demonstrate the validity of ePortfolios as authentic assessments of student learning in higher education.

### **Other Benefits**

~~“A notably higher 80% of employers say that it would be very (36%) or fairly (44%) useful to be able to see an electronic portfolio of student work that summarizes and demonstrates a candidate’s accomplishments in key skill and knowledge areas (e.g. effective communication, knowledge in their field, applied skills, evidence based reasoning, and ethical decision making).” Compared to “Fewer than half of employers say that they find the college transcript very (9%) or fairly (36%) useful in helping them to evaluate job applicant’s potential to succeed at their company.”~~ page 13

### **SUMMARY**

Our investigations of the literature and best practices have reinforced that integrative learning is an approach that is critical to the education of our students, and it is consistent with our mission, Academic

Master Plan and Quest for Student Success. MT Engage is centered on what we know about teaching and learning (e.g., the effectiveness of high-impact practices; the importance of reflection and synthesis; the lifelong benefits of integrative thinking; and the potential of ePortfolios to support learning and assessment). MT Engage's emphasis on integrative thinking will make a positive impact on MTSU students as we help undergraduates "put the pieces together and develop habits of mind that prepare them to make informed judgments in the conduct of personal, professional, and civic life" (AAC&U/Carnegie Foundation, 2004).

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