The Use of High Impact Practices to Increase Critical Thinking in Undergraduate Students

Executive Summary

Recently, there has been a shift in higher education policy to focus on student persistence and completion, sometimes referred to as the Completion Agenda (Hatch, 2012). This agenda is grounded in growing concerns inside and outside of the academy over low retention rates amidst mounting student debt. The 2012 Critical Skills Survey, a whitepaper from the American Management Association stated that nearly 75% of managers believe critical thinking will become more necessary to their organization in the next 3-5 years. That study also reported a 10% increase in respondents who indicated their newest employees were below average on critical thinking (which was up nearly 4 points from a 2010 study).

To address this concern, many institutions have pursued initiatives that foster engagement and success. Research has demonstrated that engagement is positively correlated with academic success and persistence and that institutional policies and practices have an influential effect on student engagement (Baker, Fisher, & Johnson, 2012).

This concept paper advocates for the use of high-impact practices (HIPs) that engage students in deeper learning with a particular focus on the development of critical thinking skills. HIPs have been positively associated with gains in critical thinking, as well as satisfaction, persistence, academic achievement, graduation, and social engagement (Hatch, 2012).

The USM QEP could assess the degree to which students demonstrate improved critical thinking through involvement in high-impact learning experiences (that result from the implementation of HIPs). For example, a student who participates in an internship, field experience, collaborative research project, or study abroad might be asked to reflect critically on that experience.

Brief Review of Literature

High impact practices (HIPs) are characterized as experiential learning activities that are effortful, assist students to students build meaningful, substantive relationships, engage students across differences, provide students with rich feedback, help students test and apply learning in new situations, and offer opportunities for students to reflect on their actions and perspectives (Kuh, 2008). Experiential learning activities have been shown in the literature to be correlated with positive educational outcomes for students. Common examples of these HIPs are: First year seminars/experiences, common intellectual experiences,
learning communities, writing-intensive courses, collaborative assignments and projects, undergraduate research, diversity and global learning, service/community-based learning, internships, and capstone courses and projects. In culmination, Kuh recommended that every student participate in at least two HIPs during their baccalaureate education: One in the first year, and one later in relation to their academic program of study.

The Association of American Colleges and Universities (AAC&U) noted that high impact practices promote the development of essential learning outcomes, such as critical and creative thinking, that will help prepare students for 21st century challenges (Kuh, 2008). This QEP concept, in its advocacy for high impact practices, is well supported by USM’s values—most especially, “the degree to which our students become well read, articulate, and creative and critical thinkers,” (USM Vision, Mission, Values, Plan, p. 1). The concept is further grounded in the mission (cultivate intellectual development) and strategic priorities (Climate of academic success and community connections) of USM.

Participation in experiential, high-impact learning experiences has been shown to be effective for all students. Results of participation are more significant for students with lower entering academic test scores and underserved communities. This is significant for USM, a research university that aspires to be a “the Gulf South’s premier research university,” and that serves many non-traditional and under-represented students. Although a number of HIPs are currently available to USM students, a strategic effort to coordinate these is not in place. College Learning for the New Global Century published by the LEAP National Leadership Council (AAC&U, 2007) called for institutions of higher learning to be more intentional about effective practices that help students synthesize and integrate their learning in an applied setting. This integration coalesces to prepare students for life after undergraduate studies, whether it is a career in business or industry, civil or public service, or continued education at the graduate level.

One example of a university that has used a strategic planning process to institutionalize the use of HIPs is Indiana University-Purdue University Indianapolis (IUPUI). In 2008, IUPUI developed the RISE (i.e., Research, International Studies, Service Learning and Experiential Learning) to the IUPUI Challenge (Baker et al., 2012). RISE integrates “real world” learning with formal classroom instruction. This is demonstrated across the curriculum and co-curriculum over the tenure of a student’s educational experience from orientation to first-year seminars, to high impact activities within majors, and finally to a culminating capstone experience within each discipline. RISE is intentionally focused on connecting students to support the application and synthesis of knowledge. These connections exist among and between students, faculty and staff mentors, community, and international partners.

Several other institutions have placed HIPs at the forefront of their QEP efforts. The University of West Florida is developing their QEP 2015 around the use
of HIPs to improve student’s written and oral communication skills for professional success. Florida State University institutionalized their Garnet and Gold Scholar Society to emphasize leadership, professional citizenship, and research skills in the framework of collaborative relationships. Tulane University’s Center for Public Service offers students the opportunity to participate in service learning activities that connect them with community stakeholders, develop professional skills, and contribute to the greater public.

Although some universities have developed institution-wide HIP efforts that increase student engagement and success, most institutions offer some form of high-impact learning. Unfortunately, only a small number of students tend to be involved, and few of those are historically underserved students (e.g., first generation college students, students with lower ACT scores, and Hispanic and African American students) for whom the effects of HIPS are greatest (AAC&U, 2008).

The University of West Florida’s College of Professional Studies developed a strategic initiative—called the Emerge Experience—to increase student learning and development through the use of HIPs to contribute to and be successful in a global society. Emerge is intended to encourage students in that college to acquire professional and leadership skills desired by employers. Although many educational programs in that college include HIPs in their curricula, students are distinguished as “Emerge Scholars” by participating in unique HIPs that extend beyond the classroom walls. These truly extra-curricular opportunities require an additional commitment from students, and are designed to build relationships, engage across differences, and allow students to apply knowledge in a deep and meaningful way (AAC&U, 2008). Examples of the experiences highlighted in that program include: Study abroad, faculty-student research, internships, service-learning projects, and learning communities organized to explore a “big question” or complete a project with “real world” applications in partnership with a business, non-profit organization, or local community agency.

**Learning Outcomes**

The central learning outcome is the improvement of critical thinking. The proposed direct measure is the AAC&U Critical Thinking VALUE rubric (Rhodes, 2010). Alternative possible secondary or ancillary learning outcomes:

- Inquiry and analysis
- Creative thinking
- Written communication
- Oral communication
- Quantitative literacy
- Information literacy
- Teamwork
- Problem solving
- Civic knowledge and engagement
- Intercultural competence
- Ethical reasoning
- Foundations for lifelong learning
- Global learning

Program Outcomes

In addition to direct (and indirect) measures of student learning, a QEP focused in this regard offers the opportunity to measure several other program outcomes. Such outcomes might include retention, student success (i.e., semester GPA and hours earned, acceptance and placement rates of graduates and in licensure examinations), career readiness attitudes, and recruitment. USM can use this model to recruit top quality students by advertising this project’s commitment to their education.

Overall Evaluation of Project

The components of student learning and program outcomes may prove best modeled and evaluated for the duration of the QEP using a Logic model. Logic models are ideal for displaying the inputs, activities, audience(s), and short-, mid-, and long-range outcomes. Logic models are also visually appealing and relatively simple to interpret and follow.
References


