## **Resource Guide**

# High-Impact Educational Practices: Capstone Courses and Projects

High-Impact Practices are specific active learning practices that educational research suggests increase rates of student retention and student engagement. Capstone courses and projects are one of the 11 types of high-impact practices endorsed by the Association of American Colleges and Universities. The AAC&U defines capstone courses and projects as "culminating experiences [that] require students nearing the end of their college years to create a project of some sort that integrates and applies what they've learned." In capstone experiences, students have the opportunity to synthesize a wide range of skills and knowledge, and to articulate their learning in ways that demonstrate competence across general education requirements, a major, minor, or other program of study. These projects often represent how a student brings ideas learned over the course of many semesters into a single artifact or a single collection of artifacts. In some cases, capstone projects are used not just as a tool of culmination, but also as a beginning in that they can also show the readiness of students to enter into a given vocation. Ideally, capstones are transformative experiences as they prompt students to assess their own perspective, attitudes, and values in relation to the skills and knowledge they have created (Still, et. al., 2009).

### Characteristics of Effective Capstone Experiences

- Sets appropriately high standards for achievement
- Creates a framework or schedule over time that includes markers for progress, and provides timely feedback
- Establishes a clear expectation of a significant investment time
- Includes frequent contact with supervising faculty, with specific goals for those interactions
- Designs multiple opportunities and methods for critical reflection and learning integration
- Requires students to integrate and apply what they have learned throughout an entire experience (e.g. undergraduate, major, program)
- Incorporates real-world applications or relevance
- Includes meaningful discussion with other students
- Analyzes knowledge and skills gained as well as areas for future development
- Involves a public demonstration of competence

#### Examples of Capstone Experiences

- Language, literature, writing, teaching, or art portfolios
- Local health initiative plans
- Curated historical exhibits
- Mechanical apparatus or engineered systems
- Business or efficiency plans



- Advertising campaigns
- Health impact studies
- Musical compositions
- Performances

#### Resources

Berheide, C. W. (2007). Doing less work, collecting better data; using capstone courses to assess learning. *Peer Review*, 9(2).

Hummer, J. (2012). The Content of Capstone Experiences: Determining Best Practices in Assessing the Culmination of Student Learning. In *APSA 2012 Teaching & Learning Conference Paper*.

Kuh, G. D. and O'Donnell, K. (2013). Case Studies by Sally Reed. *Ensuring Quality & Taking High-Impact Practices to Scale*. (Washington, DC: AAC&U). For information and more resources and research from LEAP, see www.aacu.org/leap.

Kuh, G.D, & O'Donnell, K. *Ensuring quality and taking high-impact practices to scale*. Washington, DC: Association of American Colleges and Universities.

Still, D. Harvard, B. M., & Cooper, I. (2009). The senior capstone as a transformative experience. *Liberal Education*. Retrieved from: http://www.aacu.org/liberaleducation/le-suog/documents/LE-SU09\_Sill.pdf

