Abstract

The Metropolis and the Magnifying Glass

Capstone experiences are excellent vehicles for students to demonstrate proficiency in general

education competencies and professional literacy skills as well as reflect on college years and

prepare for transition.  This is true whether students are transitioning to work, transfer to senior

colleges or both.  Capstone experiences also provide an authentic opportunity for summative and

formative assessment of academic programs and for assessment of the capstone model itself.

Although capstone experiences are difficult at the community college level because of time and

credit constraints compounded by the troubling characteristics of community college students,

they are worth experimenting with for the many benefits they offer.  This article will share the

design of a community college capstone experience that links three courses in a work integrated

learning model that uses applied research projects as internship experiences.

The Metropolis and the Magnifying Glass:  A Community College Capstone Experience

Some years ago I collaboratively developed a very successful cluster of courses that featured a research internship.  The cluster linked three courses - urban sociology, the internship and the internship seminar.  The design of the cluster required students to research the demographics of small business owners in a very diverse local community.  From this experience students learned research skills, they were mentored by two members of the College's faculty and they learned new technology by analyzing data with SPSS and plotting research results using GIS mapping.  Afterwards, for a host of reasons, the project lost priority.  Thanks to an institutional interest in redesigning capstone courses, the idea has resurfaced and is now being promoted as both a community college capstone experience and a learning community with a work integrated learning component – a very provocative buildup.

Institutional Background

LaGuardia is a large urban community college located in an area of New York known as one of the most diverse communities in the country.   It is not surprising then that the College represents a smorgasbord of languages and ethnicities.  In fact, according to the College's most recent Institutional Profile, LaGuardia's students come from 163 countries and speak more than 100 different languages (Institutional Profile, 2008).  These students, not unlike many other community college students, are also mostly first generation college students from working class backgrounds that struggle with family responsibilities and academic challenges as well.

For these and other reasons, capstone experiences are unusual at community colleges. Yet, LaGuardia has been offering them for many years.  However, though these course designs were well-intentioned, it seems course goals were vague and offered little or no assessment.

Thanks to funding from a Department of Education Grant, the College is now analyzing its capstone courses to determine what course objectives should be and how best to achieve them.

This year some of these funds are being used to offer a Center for Teaching and Learning professional development seminar called *Re-thinking the Capstone Experience*. Out of participation in this seminar, I have revitalized the old idea and redesigned it as a project-based capstone model with two major objectives: (i) to meet what has been identified as critical elements of a capstone experience – to provide students with an opportunity to demonstrate mastery of interdisciplinary skills and knowledge, to demonstrate career preparation and professional development as well as to reflect on the culmination of their college experience and plan next steps (Gardner, J. N., & Van der Veer, G. & Associates, 1998); and (ii) to provide an authentic assessment of student learning (Jensen & Wenzel, 2001). The project-based model was chosen because it seems an excellent way to gauge student development in the general education core competencies (written and oral communication skills, critical reading and thinking skills, quantitative reasoning skills, research, information and technological literacy skills) and the professional literacy skills as well, including leadership, ethics, diversity sensitivity, team work, self-management, motivation, and an appreciation for the global and social contexts of knowledge. These objectives together will provide an opportunity for students to engage in hands-on self-assessment and to make informed decisions about where they are and what skills and competencies need strengthening to reach their goals. They will also provide the College with a tool to measure how well we have prepared our students for post-LaGuardia life.

The Courses – The Metropolis and the Magnifying Glass

This capstone experience thematically links three mandatory courses into an integrated program of study (a learning community) featuring an applied research project as the internship.

The name of the learning community is "The Metropolis and The Magnifying Glass" – the theme is investigating local community issues to build partnerships and share faculty research expertise in examining and maybe solving practical problems.  Three existing yet well-suited courses have been selected to meet this end - urban sociology, the internship and the internship seminar.

        Urban Sociology - LaGuardia is very proud of its urban study requirement because it reflects the college's commitment to the communities it serves and to its students engagement with those communities (LaGuardia Catalog, 2008/2009).  This course uses an interdisciplinary and experiential approach to investigate the relationship of social issues, structures and policies to urban areas and their populations -- ideally suited to applied research.

        The Internship - the internship is also a mandatory degree requirement and provides students with a work-integrated learning opportunity to maximize learning outcomes through synthesis of theory and practice in a manner that helps students strengthen knowledge, skills and attitudes.  This is difficult to accomplish synergistically with traditional pedagogies (Alderman and Milne, 2005).  The internship is an equally nice fit for applied research and offers a variant internship model to students interested in strengthening research and writing skills and focusing on those habits of mind traditionally associated with the liberal arts.  During the internship students will be required to interface with representatives from community organizations and local political offices that advocate for specific populations and/or champion social issues like affordable housing, immigration, employment, healthcare, etc.  With guidance from faculty and community partners, students will be responsible for formulating research questions, gathering data, analyzing the data and communicating results to campus, community and conference audiences where appropriate.

The internship seminar – This is the reflective component of the internship.  Here, in addition to providing students with a forum to reflect on project progress and dilemmas, the seminar will be used to reinforce course concepts related to specific research projects and to help students strengthen research/writing skills and information and technological literacy.

Linking these courses in this way is a win-win situation for students, faculty and the College.  Among other things, this learning community will provide students with faculty mentors from two academic departments – Social Science and Cooperative Education.  For faculty it will provide an opportunity for collaboration that takes faculty and students outside of the College together for research purposes, as well as provide an opportunity to develop collaborative scholarship.  For the College it will provide additional connections with community partners and visibility for the genius of our students, notwithstanding their challenges, and the strength of our research expertise.

Characteristics of the Experience

This capstone model is unmistakably labor intensive.  For this reason, it is important that the design be well-structured to avoid further overwhelming interested faculty, though there are clearly other benefits to the design (Musicant and Ondich 2005).  Therefore, the Project has been tightly planned with the following characteristics:

Project based – the design is based on applied research project(s) that allow students to apply their learning and skill development to real community issues, a laudable goal for capstone experiences (Gardner, J. N., & Van der Veer, G. & Associates, 1998).  Faculty will be responsible for ensuring that projects are suited to established community partners, allow for integration of theories, technology and research and meet previously established rubrics.

Teamwork - the projects will be designed as group projects to allow students to strengthen their teamwork, diversity sensitivity and leadership skills.

Evaluation – the project will be evaluated by students, faculty and community partners. This is a rich opportunity for both summative/learner and formative program assessment that could offer almost immediate insight into what works well and, what does not (Shaeiwitz, 2002).

Final Presentations – students will be required to publicly present research results to college, community and conference audiences where appropriate.  These presentations will allow students to demonstrate both the general education competencies and professional literacy skills mentioned above.

ePortfolio – Most students at LaGuardia are required to create an ePortfolio.  This experience will require students to use the ePortfolio to track project progress and individual contributions to project results.  The ePortfolio will be monitored regularly during the semester and used as a basis for giving individual grades to group projects.  This will also ensure that the ePortfolio, that is often designed to share with family and friends, is rather designed for a more professional audience (Steerling-Deere, 2009).

| Problems/Challenges | Advantages |
| --- | --- |
| Can we replicate successful dynamics | Program and model assessment |
| Evaluating individuals on group projects | Faculty and peer mentoring of students |
| No faculty integration incentive | Faculty collaboration, research/scholarship |
| Workload, workload, workload | Non-traditional internship model |
| Institutional support in hard economic times | Sustainable/makes use of existing programs |
| When should it be taken, who should decide | New uses for ePortfolio |
| | Relationship building |

Student Outcomes

Capstone experiences help students understand the purpose that different educational experiences serve in promoting their learning and development and know how to take advantage of them. This is some of what we mean by being masters of their own learning.  With this in mind, capstone experiences work best when students embrace the idea and are well-acquainted with the purpose and anticipated outcomes of the design.  The ultimate capstone project, then, would be one designed by students, or at least designed with student input, where faculty and students have collaborated with industry partners to develop an information gathering project that addresses an issue related to the student's career interests.  Learning outcomes for such a project could include the ability to:

- demonstrate aptitude for synthesizing research-based literature and major-specific theory/knowledge to solve problems;

- integrate disparate, major-specific and interdisciplinary knowledge, use this knowledge to draw logical conclusions and present these conclusions intelligibly;

- communicate in oral and written forms to apprise/persuade others and demonstrate many of the other core academic competencies important for student transition;

- understand the impact of ethical, political, economic, and legal issues related to the issue under investigation;

- advocate for change;

- understand the importance of and develop a commitment to lifelong learning and advanced study; and

- demonstrate readiness for transfer (evidenced through a written statement of purpose,

  loaded to the student's e-Portfolio, that establishes the student's ability to write at the

  senior college level and details next steps after graduation).

As they work on their projects, students learn the challenges of designing and implementing a

project and learn how to deal with unanticipated occurrences – mirroring the type of experiences

graduates will face when they begin their careers.

Conclusion

Capstone experiences are more difficult at community colleges because of time and credit

constraints.  This problem is compounded by the troubling academic and personal profiles of

community college students in general and LaGuardia's students in particular, the majority of

which are first generation college students and recent immigrants.  Nonetheless, these

experiences are an excellent way to allow students to demonstrate knowledge and skill

development prior to transition.  This capstone model has many anticipated bonuses:  adopting

the project approach to the capstone experience and making use of the internship and the

ePortfolio offers a way to make the project more manageable; using project participants for

assessment is a way to measure learning and project outcomes; and using existing courses that fit

into faculty workload models makes the project both cost effective and sustainable.  For students

– they will be able to demonstrate their competencies and skills in a way that provides a rich self-

assessment opportunity; they will be more intimately exposed to the diversity the College offers

and to faculty and peer mentoring; they will also learn to be more critical in their thinking and

more inquisitive in their problem solving.  For the College, LaGuardia is a large urban

community college with a mandatory internship requirement and constantly increasing

fundraising goals in difficult economic times.  Both needs are served by additional opportunities

to publicize the good works that we do and to develop or strengthen relationships with community partners.  Last, but not least, the project offers an opportunity for a natural coupling of the academic and professional literacy that together prepare our students best for next steps in their lives, whatever those next steps are.

Bibliography

Alderman, B., & Milne, P. (2005). *A Model for Work Integrated Learning:  Optimizing Student Learning Outcomes*.  Lanham, MD: Scarecrow Press.

Gardner, J.N., & Van der Veer, G., & Associates. (1998). *The Senior Year Experience: Facilitating Integration, Reflection, Closure, and Transition*. San Francisco: Jossey-Bass.

Jensen, V., & Wenzel, A. (2001). *Creating a Sophomore Capstone Experience in the Community College*. Retrieved February 1, 2009, from EBSCOhost Academic Search Premier database.

LaGuardia Community College, Long Island City NY.(2008/2009). *Catalog*.

Lourdes College, *Master of Science in Nursing (MSN) Program Assessment Plan*. Retrieved April 9, 2009, from http://www.lourdes.edu/Portals/0/Files/Assessment/MSNPlan.pdf.

Mesa Technical College, 2000-2001 Student Learning Assessment Model, handouts from 2001 AAHE Assessment Forum.

Musicant, D.R., & Ondich, J. (2005). *A Model for a Liberal Arts Project-Based Capstone Experience*. Retrieved February 1, 2009, from http://www.cs.carleton.edu/faculty/dmusican/compspaper.pdf.

Office of Institutional Research and Assessment, Division of Information Technology, LaGuardia Community College, Long Island City, NY. (2008). *Institutional Profile*.

Schaeiwitz, J.A. (2002). *Mining Capstone Engineering Experiences for Program Assessment Results*.  International Journal of Engineering Education. Vol. 18, No. 2, pp. 193-198.

Seybert, Jeffrey, "Assessing Student Learning", Assessment Update, Volume 6, Number 4, 1994

Shepard College, "VII. Culminate With a Capstone Experience" Ten Ways to Change Undergraduate Education, http://www.shepard.edu/assessweb/capstone.html.

Sterling-Deer, C.(2009).*Writing in the Disciplines, Technology, and Disciplinary Grounding.*

Retrieved February 1, 2009 from http://wac.colostate.edu/atd/technologies/sterlingdeer.cfm.

Van Kollenburg, Susan E., ed. A Collection of Papers on Self-Study and Institutional

Improvement: Proceedings of the 106th Annual Meeting of the North Central Association:

Serving the Common Good: New Dimensions in Higher Education. Chicago, The Higher

Learning Commission. 2001.