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Learning Communities In-Depth

Promoting Inquiry-Guided Learning through Student Learning Communities and Faculty Pedagogy Workgroups

James A. Anderson
North Carolina State University

Currently, North Carolina State University (NC State) and many other institutions are attempting to set higher expectations and achieve better learning outcomes in undergraduate education. Drawing upon its mission as a research institution and its commitment to prepare students for the realities of the twenty-first century, NC State began, in 1995, an Inquiry-Guided Learning Initiative (IGL) to generate communities of learners who share a commitment to four broad learning outcomes: critical thinking, habits of independent inquiry, responsibility for one's own learning, and intellectual growth and development; and student learning, promoted through the active investigation of complex questions and problems. These learning outcomes move students along a continuum from general curiosity to formal research.

A Common Language

The faculty at NC State who promote IGL have developed a consensus about the term's meaning. IGL suggests classroom practices that encourage and help students to raise, sharpen, and follow through on their own questions, to respond to questions posed by the faculty member by asking further questions and seeking answers to them, and to develop a habitual sense of inquiry that will transcend the boundaries of the course. The assumption is that students will retain information and concepts much better if they have internalized the questions to which they are related, and they learn better how to do research and evaluate evidence if they have made their own the questions whose answers they are seeking. A further assumption is that students are more ready to apply the standards of critical thinking (accuracy, precision, clarity, breadth, depth, relevance, and logic) to their work, and thereby improve their critical thinking skills.

IGL capitalizes on the strength of the research university, by fostering a community of faculty who are expert in the instruction associated with inquiry-guided learning and its movement toward formal research. Although many institutions promote cognitive outcomes within the structure of a traditional learning community, these institutions vary in the degree to which faculty learn and practice techniques that promote a deeper understanding and integration of the course material. The valid assessment of student learning within learning communities is closely linked to faculty members' shared commitment, common objectives, use of similar core sequences, and an ability to generate a culture of evidence, both formative and summative, that indicates that undergraduate education has been modified, improved, and/or transformed.

The Hewlett Initiative

Since 1995, the Inquiry-Guided Learning Initiative (IGL) at NC State has been supported by two grants from the William and Flora Hewlett Foundation

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and funding from the Office of the Provost, as well as from the Division of Undergraduate Affairs. IGL has engaged well over 6,000 students, more than 200 faculty and staff, and 60 academic and administrative units on campus. It comprises a growing First-Year Inquiry Program, a First-Year Seminar Program in the College of Humanities and Social Sciences, selected courses throughout the undergraduate program, both general education and the major, and nine lead departments in seven of the university's 10 colleges that have revised a sequence of courses in the major.

As part of the Hewlett Initiative, faculty engaged in face-to-face, in-depth, long-term interactions, and intensive experiences that allowed them to acquire and use new skills and information about teaching and learning. From 1995 to 2000, the primary focus was general education and the individual course. Since 2000 the initiative has grown and branched out in its work and impact. Now the next initiative, (the Hewlett Campus Challenge (HCC)) will emphasize a revision of a sequence of courses in the departmental major. Here the primary consideration is how courses in the major are/were related developmentally to one another: for example, how a first-semester junior's problem-solving ability compares to a first-semester senior's ability, and how instructors develop that junior's ability intentionally through instruction. Faculty participants in both initiatives are identified as Hewlett Fellows.

Faculty Center for Teaching and Learning (FCTL): Guiding the IGL Faculty Community

Initially born out of the Division of Undergraduate Affairs, the primary responsibility for continuity, accountability, and the quality of the IGL initiative now rests with the Faculty Center for Teaching and Learning (FCTL). Concerning IGL, the FCTL is charged with training, resource development, assessment, linkages to other initiatives, course development, and the maintenance of a user-friendly faculty website (www.ncsu.edu/fctl/Initiatives/Inquiry_Guided_Learning). At the outset, one of the goals of the IGL effort was to minimize faculty time and labor in terms of the accessibility of information that would inform their questions and concerns. On the website under the sub-heading "Designing an IGL Course" a faculty member can find the following:

1. Support for IGL (resource information).
2. Instructional Planning Cycle and Learning Outcomes.
3. Planning and Designing Classroom Assignments (example: sample grading rubric using analytical scoring).
4. Promoting Inquiry in the Classroom (example: the IDEAL problem solver).
5. Sample IGL course syllabi. Faculty in the sciences (and other disciplines) can review the sample syllabi for First Year Inquiry Chemistry 101 and note that the instructor incorporates IGL in the course description, course objectives, class activities, and homework assignments. The students are asked to reflect on how their work in the course promotes the development of higher order cognitive skills relative to the learning objectives in Bloom's *Taxonomy* which is listed in the syllabi.

Under another subheading on the IGL Symposium, faculty can review the summaries of faculty work under one of four tracks:

1. Classroom Teaching Practices and IGL—faculty explore how strategies such as “scale-up,” the use of Bloom’s *Taxonomy*, “the big question,” relevance for students, and criterion-based evaluation procedures support IGL and cut across disciplines.
2. Technology and IGL—faculty demonstrate the use of distance-learning technology to further IGL in a service-learning course. Another interesting presentation is “Replacing the Borg Collective with a New Learning Community: Introducing Students to IGL.”
3. Assessing the Effects of IGL on Students and Faculty—faculty present a historical review of methods used to assess various phases of the IGL initiative on the NC State campus ranging from comparative statistical analyses of student perceptions of their classes to the use of a common, holistic scoring rubric to evaluate student essays to self-reports of changes made by faculty in their courses as they began to incorporate IGL methods.
4. Other Undergraduate Initiatives and IGL—faculty from three areas (service-learning, curriculum diversity, and international programs) explore the extent to which their reform initiatives share features in common with IGL. For example, faculty in the service-learning project demonstrate how students pose questions, gather evidence and reflect on their learning to advance important outcomes of service-learning: academic enhancement, civic engagement, and personal growth. Other faculty show how writing and speaking are at the core of IGL activities.

Inquiry-Guided Learning and General Education

Multidisciplinary Studies represents a division at NC State that seeks to incorporate IGL broadly into the learning experience of its majors. The faculty has reshaped the entire major as an extended example of IGL. As students design their own major, it is their questions that propel and guide the selection of courses and shape their academic experience as a whole. In the program students define their own learning outcomes, which are linked to the four common learning outcomes that the division believes all students should exhibit at the end of the program. These outcomes are: to take responsibility for their learning by designing and implementing individualized, multidisciplinary curricula that could form a foundation for subsequent learning; to identify and formulate a multidisciplinary research question; to understand the ways of knowing characteristic of a multidisciplinary approach to knowledge; and to develop and apply research skills needed for multidisciplinary research projects.

How do faculty evaluate whether these outcomes have been realized? They utilize three primary pieces of information: the application essay with its statement of learning outcomes, defining what the student wants and expects to learn; a “three questions” essay from the Methods course (these are interdisciplinary questions for which more than one set of concepts or methods must be used in working towards answers); and the final project, a twenty-page paper on one of the questions developed in the methods course.

Assessing the Effect of Inquiry-Guided Learning at NC State

Various methods have been used to assess First-Year Inquiry courses, including pre- and post-tests of various outcomes such as moral reasoning, statistical analysis without comparison groups in which each FYI instructor was compared with all other FYI instructors, and the use of the Facione & Facione holistic critical thinking rubric to evaluate improvement as evidenced in student essays. This latter assessment involved four stages:

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1. Instructors assigned essays designed to assess critical thinking ability at both the beginning and the end of the semester.
2. Instructors submitted ungraded essays from four randomly assigned students for assessment by an independent group of reviewers.
3. Reviewers trained in the use of the Facione rubric, and blind to when the essays were written, rated the essays.
4. Ratings were compiled to assess aggregate change over the semester. The results of the assessment in spring 2002 provide clear evidence that students' abilities for critical thinking improved over the course of a semester.

Faculty who are involved in the Hewlett Campus Challenge will rely on smaller, classroom-based assessments designed by individual department teams. Current assessments include the following:

1. Department of Pulp and Paper Science—analysis of video-taped oral presentations in WPS 100.
2. Department of Microbiology—student self-reports of learning and satisfaction using case-study method in MB411.
3. Department of Philosophy—analysis of student writing using rubrics in PHI340.
4. Department of Educational Research, Leadership and Counselor Education—comparative analysis of discussion forums and subsequent performance in other classes.
5. Department of Food Science—analysis of oral presentations in FS 475, the department capstone course.

Significant Progress Toward the IGL Project Goal

The Department of Microbiology serves as a good example of the progress and accomplishments that occur when a commitment is made to undergraduate education reform. The departmental team chose to incorporate IGL into three targeted courses: MB 103 Introductory Topics in Microbiology, MB 351/52 General Microbiology, and MB 411/2 Medical Microbiology. The targeted outcomes for all three courses included helping students to build conceptual understanding, enhance problem-solving skills, enhance critical thinking, and take responsibility for their own learning. Among the strategies and activities that the faculty utilized to assess these outcomes were the following:

1. Incorporated computerized animation into the lecture-based course (conceptual understanding).
2. Incorporated homework problems that addressed extended, multifaceted questions and required students to apply general principles to issues that received limited coverage during lecture (problem-solving).

3. Assigned a research report option in which a student wrote a detailed ten-page report about a specific microorganism. The assignment required students to communicate complex issues in a clear and concise manner (critical thinking).
4. One-day-a-week students met in groups rather than lecture and worked on problems and case studies. Capitalizing on the mixed backgrounds of the group members, the exercises encouraged students to see connections between the course and other courses and experiences (responsibility for learning).

Finally, the departmental team has linked its IGL efforts to the development of curricular level outcomes, methods of assessment, and undergraduate academic program review process. This represents the type of reflective process that underscored the development of the IGL initiative several years ago. The growth of the IGL Initiative and the commitment of faculty to sustain it can serve as an incentive to existing faculty and a recruitment tool to attract new faculty and students. North Carolina State University has made significant progress towards its goal of promoting twenty-first-century learning throughout the undergraduate experience by stressing inquiry, critical thinking, responsibility, and intellectual development and growth throughout the curriculum.

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Faculty Development: Growing, Reflecting, Learning, and Changing

Jodi Levine Laufgraben
Temple University

This case presents a brief history of faculty development in the learning communities program at Temple University. The evolution of our faculty development efforts is closely related to the growth and progress of our program. Since faculty development efforts evolved concurrently with improvements in assessment, this case also follows the changing context and goals of a learning communities initiative now celebrating its tenth year.

In our program, the term *learning communities faculty* refers to the individuals who teach courses as part of a community, including professors, part-time instructors, graduate assistants, and undergraduate peer teachers (Levine, 1998). Since graduate assistants teach the majority of first-year writing courses in our communities, they are a significant segment of our program faculty. We quickly learned that a “one-size fits all” model of faculty development does not always work best at a research university where enrollment declines and surges are cyclical; graduate students and part-time faculty work along side tenured faculty to deliver the curriculum; the demographics and level of preparedness of the student population change each year; and institutional priorities for undergraduate education, teaching, and research are in transition.

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About Temple and Our Learning Communities

Temple University, a state-related institution in the Commonwealth System of Higher Education, is a comprehensive research university serving more than 20,000 undergraduates. Temple University first offered learning communities in 1993 to help the university address two key concerns: (1) development of a sense of community and (2) improvement of teaching and learning at the freshman level. A shrinking applicant pool and declining enrollments precipitated the need to attract and retain good students. It was also hoped that learning communities would improve teaching and curricular cohesiveness in the general education program (the Core Curriculum) implemented in the 1980s.

The majority of learning communities at Temple are linked-course communities that satisfy Core, college, and/or major requirements. Most often, this pair includes one of two first-year writing courses: Introduction to Academic Discourse (English 0040) or College Composition (English C050). Other communities feature a first-year math course such as college mathematics, pre-calculus, or calculus. Other courses in the communities come from schools/colleges and departments across the university, including chemistry, women’s studies, African-American studies, criminal justice, psychology, sociology, journalism, theater, film and media arts, and engineering.

In Temple’s learning communities, students enroll as a cohort of fifteen to twenty-five students in two courses that share a particular theme. Faculty work together and with the students to integrate course material and to promote collaborative learning, students learning from each other as well as from their teachers. Many learning communities include a section of the Freshman Seminar as a third course. The Freshman Seminar is a one-credit student-success course

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team taught by a lead instructor (faculty member, academic administrator, or student affairs professional) paired with an undergraduate peer teacher. When the seminar is part of a learning community, the instructors are part of the learning community teaching team.

The program now enrolls more than 1,100 students each fall, primarily traditional-aged, first-semester college freshmen. Nearly 70 percent of the students live on campus. Student participants are diverse in terms of academic interests, entering academic abilities (SAT scores, high school rank, placement test performance), ethnicity, and race. Faculty participants are also diverse, most notably in position and disciplinary perspective.

Faculty Development

As a program grows and develops, so does its faculty development needs. As we moved from the early stages of program development to the building phase to our current sustaining and improvement focus, the goals and tone of our faculty development activities shifted as well. Ideas for change came from three sources: (1) what our teachers told us they needed and wanted to know; (2) assessment of our program; and (3) trends and literature on faculty development and best practices in undergraduate education.

During the *early stages* of program development and implementation, faculty development decisions were made by the Faculty Fellow for Learning Communities and the program director (the “we” in this case), in consultation with a faculty planning group. Evaluations from prior faculty development events also informed the planning. Ideas for sessions and presenters also came from workshops we attended at national conferences or in consultation with various learning community leaders across the country.

At the onset, we held faculty development workshops during the school year that focused on the definitions, models, and purposes of learning communities. Outside speakers and consultants came to campus to educate faculty on the concept and to help Temple consider the nature and scope of its learning communities program. The audience was the broader Temple community along with the faculty and departments identified as early adopters.

When we moved into the implementation phase of our program and began to increase the number of communities offered, academic-year sessions were replaced with two-day summer workshops for faculty teaching in our fall learning communities. The workshops featured an overview of the program along with sessions on creating community, innovative pedagogy, and student development. Workshop presenters modeled the active learning environments we hoped our teachers would create in their classrooms. Presenters, primarily experienced Temple faculty members, demonstrated collaborative teaching and learning techniques and classroom assessment approaches teachers could use with their students. Topics included writing-across-the-curriculum, learning theory, teaching with case studies, and classroom assessment. Student affairs professionals talked about student development and group dynamics. Faculty participants received a stipend for attending a workshop followed by a second stipend paid during the fall semester.

The first major shift in our learning communities faculty development programming came when we moved from the implementation to the *building phase* of our program. Because the provost asked us to annually double the number of student participants, more and more faculty were joining the program. But for the first time we also had a corps of returning, tenured faculty teaching in communities. We not only needed to orient the new faculty to the goals and characteristics of learning communities but also had to continuously engage our returning faculty in conversations about pedagogy, student learning, and assessment. Also, with the additional communities we became increasingly concerned about consistency and quality of curricular integration across our offerings. We were providing students with a supported transition to college, but were we changing teaching and learning experiences? This question led to several changes in our summer workshops:

- implementation of a community plan (curricular planning worksheet)
- a new faculty handbook (print versions since 1999 with online availability since fall 2001, at www.temple.edu/lc/faculty_resources.html)
- use of external presenters on teaching and assessment topics, including intellectual development theory and the use of student groups in the classroom
- involvement of returning faculty as session leaders
- wider dissemination of assessment reports

The community plan is a modified version of curricular planning or learning communities proposal forms used at other institutions. The primary goal for the planning worksheet is to guide teaching teams in the development of the goals for their community. Each teaching team is asked to create a theme for its community and to outline how team members will integrate the theme across their courses, the pedagogical strategies they will use to promote cross-disciplinary learning, the ways they will enhance connections between and among students and teachers, and their assessment plans. Curricular themes have included “Thinking Beyond the Self,” “The African-American Experience in Philadelphia,” “Seminar, Sex, Psych and Study Skills,” and “Relations Between Nations: Perspectives on International Relations.”

The faculty handbook has three sections: (1) general information about learning communities and our program; (2) advice for creating and sustaining a learning community, including our curriculum planning worksheet; and (3) teaching tools and resources for faculty. Workshop sessions focus on successful teaching strategies, and veteran LC teachers lead a panel discussion, one of the most highly rated elements of our summer event, on what worked and what didn’t work in their learning communities. We also routinely share assessment results, giving new and returning faculty a chance to offer suggestions for improvement. Faculty receive a stipend for attending the summer workshop and each member of a teaching team receives a stipend on submission of the community plan.

These changes promoted increased attention to the curricular planning process and a subtle shift from faculty development at a program level to faculty development at the *community* level. A locally developed learning community survey administered to students in fall 2000 and again in 2001, however, still

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revealed inconsistency in terms of curricular integration and interdisciplinary learning across our thirty plus communities. Entering the *sustaining and improving phase* of program development, we still needed to improve our faculty development efforts.

First, we revisited the goals of our program. In 1993 we had broad goals of improving teaching and learning, creating community, and a related goal of bolstering retention. In the late 1990s the context for our program changed—the university was experiencing enrollment growth, was attracting better students, and had significantly improved retention. This new context allowed us to refocus our program goals. At a spring 2002 learning communities retreat sponsored by the Northeast Region of the National Learning Communities Project, a team of Temple learning communities faculty—including a student who participated in the program and returned as a peer teacher in the seminar program—created new goals: (1) promote the integration of knowledge across disciplines; (2) support students' transition to college-level learning; and (3) enhance connections between and among students and teachers.

The faculty handbook and curricular plan were modified to incorporate the new goals. Coffee mugs that celebrated the program's tenth year summarized the goals and were distributed to program faculty, senior university leadership, and academic advisers across campus. Additional changes to faculty development included:

- a Blackboard Community for learning communities faculty
- summer planning meetings
- a modified stipend policy
- a mid-semester community report

We now have two primary summer activities. First, a summer meeting and luncheon to orient new learning communities faculty to the goals and expectations of the program. At the 2002 summer meeting we unveiled our new community site on Blackboard, a web-based course organization tool that can also be used to communicate and share documents across a community or organization. The Learning Communities site features copies of all planning worksheets, sample syllabi and community plans, folders for each community to post their plans and syllabi, reminders about the semester calendar, and support resources for students. All faculty in the program are subscribed to our site.

This is followed by a teaching, learning, and assessment workshop open to all program faculty. The workshop participants receive a small stipend. Then, following the workshop, we offer summer planning sessions on four or five dates and times in July and August when LC teaching teams can meet in a designated space to work on their community plans. Refreshments are provided and each team member receives a stipend when the plan is submitted. These sessions have been very successful. According to one tenured faculty member and long-time learning community participant: "The summer event helps to connect the teachers so you can enter the semester as a team, knowing one another as well as one another's goals for their classes. This enabled us to get some rapport going among the teachers, which pays off later as the semester continues."

To assess if these faculty development changes were effective, the program director held reflective interviews during spring 2002. Faculty shared their expectations and realities for teaching in communities and offered suggestions for improvement. One suggestion was holding teaching teams more accountable for implementing their plan and for communicating with each other during the term. Many faculty commented that even the best developed plans can get sidetracked once the demands of a semester begin to pull teachers in multiple directions.

In response to this concern, two of our returning teachers (a tenured faculty member and a former graduate student, now a new Ph.D., under a Dean's Appointment teaching contract) designed a mid-semester community report modeled after our community plan. Faculty complete this report around the seventh week of the term and each member of the teaching team receives a stipend when the report is submitted. "I think the mid-semester meeting is particularly useful because [you] are forced to not only talk about 'grand visions' for the course, but [to also] realistically confront what has gone well and what has not," said one faculty member.

Next Steps

Although many of these changes have allowed us to reshape faculty development so the focus is now on creating integrated curricular, teaching, and learning experiences for our students, we are still not offering the "ideal" faculty development menu. We will continue to develop our online handbook and Blackboard site so that faculty development can be 24/7. Faculty will be invited to suggest topics for the summer meeting and additional dates will be added for summer planning sessions. To address the reoccurring problem of late assignments to learning communities sections—a reality other research universities may face as budget crises slow the hiring of full-time faculty and lead to the late appointment of part-time faculty to meet enrollment demands, we are working with key departments, particularly first-year writing, to make earlier, permanent learning communities teaching assignments in those communities where a tenured or dean's appointment (teaching contract) faculty member has already been assigned.

Over the past ten years we have learned that faculty development decisions need to be integrated with ongoing program planning and assessment activities. Our advice: be flexible and willing to change the focus and content of faculty development. Listen to faculty and survey the learning communities landscape (through the learncom listerv or by attending conferences) to benefit from what has worked or not worked on other campuses. Faculty development should be not merely training, but an important opportunity to create a learning community for faculty.

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References

- Levine, J. "Talking About Teaching and Learning: Faculty Development for Learning Communities Faculty." *About Campus*, (January/February 1998).

University of Maryland College Park Scholars: Creating a Coherent Lens for General Education

*Nancy S. Shapiro
University of Maryland*

The University of Maryland, a large, research-intensive, public state university midway between Washington, D.C., and Baltimore, Maryland, serves approximately 30,000 graduate and undergraduate students. The university has the advantages of both an urban and a suburban setting, with a sprawling campus, southern-style architecture, traditional red-brick buildings, and grassy malls lined with cherry trees, as well as easy metro access to Washington's museums, government offices, and Georgetown clubs. The university has made a transition over the past ten years from a largely commuter campus to a residential campus dominated by renovated residence halls, a new performing arts center, a state-of-the-art athletic facility, and new sports arena.

Learning communities were introduced in 1994 to address a recruitment and retention problem: the most highly qualified students in the state were opting to go out of state for their college education. Over the course of the next five years, learning communities helped turn that trend around, and also transformed undergraduate education in significant ways. Today, in addition to the College Park Scholars program, the university has initiated several other living-learning communities so that more than half of the students who enroll at the University have an opportunity to participate in a structured learning community experience.

College Park Scholars

College Park Scholars is a community of twelve special living-learning programs for academically talented first- and second-year students. Each program focuses on a particular interdisciplinary theme. The twelve programs each have faculty advisory boards that design two-year curricula that fulfill general education core requirements, using their specific theme as a lens to create coherence. The twelve themes are carefully designed to be interdisciplinary, and do not require students to be in any major, although by the end of the two-year program, it is not uncommon for students to select majors closely associated with their College Park Scholars programs. The twelve programs include "Advocates for Children," "American Cultures," "Arts," "Business, Society, and the Economy," "Earth, Life, and Time," "Environmental Studies," "International Studies," "Life Sciences," "Media, Self, and Society," "Public Leadership," "Science Discovery, and the Universe," and "Science, Technology, and Society."

Regular university faculty who rotate into the program as program directors are provided with released time by the university to direct and teach the special courses in the program. They are responsible for designing curricula and developing unique courses that ground students in the basic knowledge of their program's theme. In addition, they advise students during their first two years, fulfilling the program mission of "making the big store small." Students take

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clusters of thematic courses that help fulfill their core, general education graduation requirements, and form the building blocks of knowledge in specific areas. Generally, the College Park Scholars curriculum will amount to seventeen to twenty-two credits during the two years—an important fraction of the students’ overall college curriculum.

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Interdisciplinarity and Coherence

Each College Park Scholars program presents a “lens” that can be used to help students make decisions about which courses to take to fulfill the core distribution requirements. With a course catalogue that looks like a telephone book, University of Michigan College Park (UMCP) offers somewhere in the neighborhood of 5,000 different courses—an overwhelming number of choices! For that reason, faculty in each program carefully sift through the possible distribution requirements and match them with courses offered during a given semester, and then make strategic recommendations in all the core areas. For example, students in the “Advocates for Children” program are guided to choose among the foundational courses that will help them understand some of the interdisciplinary themes that arise when dealing with children’s issues: psychology, sociology, children’s literature, American history, economics, etc.¹ The program director narrows the list of choices, and then designs a colloquium (freshman seminar) to impose some coherence on the intentional array of courses.

Faculty directors design curriculum around two key principles: interdisciplinarity and coherence. Understanding how different disciplines interrelate is a requirement in our complex world. We understand, for example, that computer programmers are expected to be familiar with issues of privacy and security, that financial planners need to understand the social issues that impact the economy, and that teachers need to understand the political forces that shape educational policy. Each College Park Scholars program is designed to be interdisciplinary in order to represent the real-world relationships among various fields of thought. Students are encouraged to choose programs where they have an emerging interest (not necessarily an academic major), and program faculty are encouraged to reach out to their colleagues in different departments across campus as resources. The interdisciplinary nature of the program is ideal for undecided students who want to explore different academic fields, as well as students who have already identified a major field of study.

The one-credit colloquium course, which is required each semester for four semesters, is more than merely a community-building seminar. It serves as the focal point for examining cross-disciplinary texts, lectures, and research. The colloquium, together with a theme-specific English composition course in the first year, is intentionally designed to emphasize the coherence of an interdisciplinary approach to complex topics. Last year, for example, the director of “Science, Technology, and Society” identified the following topics for discussion in the first semester colloquium: “Transportation in the 21st Century,” “New Digital Technologies,” “Science, Religion, and Belief,” “Biotechnology,” and “Is Space a Safe Place?”. Students raised more questions than they answered in these sessions—but isn’t that the whole point?

Examples of College Park Scholars Colloquia

American Cultures

Colloquium Topic: The American Dream

What comes to your mind when you hear the phrase “the American Dream”? A house in the suburbs? Financial success? Freedom? Do you think every American shares the same dream you do? What exactly do you want out of life, anyway? Our last colloquium will focus on this elusive concept and give you the opportunity to connect your CPS-AM experiences to your sophomore project.

Colloquium Topic: Growing Up American

Have you ever wondered what it would be like if you had been born in another place and time? We all start out pretty much the same, at the moment of birth, but what happens after that has a lot to do with our social and cultural environment. This semester we take a look at American childhood, from toys to TV, from school to summer camp and from booties to the “Bootie Call.” We’ll also begin exploring interest areas for your sophomore project, which is just around the corner!

Life Sciences

This colloquium is designed as a speaker series; over the course of each semester, experts from a variety of life sciences disciplines present their research and career experiences. What does it take to become an ER physician, a researcher at the Food and Drug Administration, or a coral reef specialist? What is it truly like to work at the U.S. Department of Agriculture, the National Institute of Mental Health, or the National Zoo?

Such questions are asked and answered in colloquium, but students are also given the opportunity to engage in first-hand learning on location. CPS-Life Sciences offers relevant local trips during the course of each semester. Examples include behind-the-scenes tours at the National Zoo and University of Maryland Shock Trauma Center, visits to veterinary labs, and trips to Chesapeake Bay.

Colloquium Topic: Infectious Diseases

Local Experience: Mutter Medical Museum, Philadelphia

Colloquium Topic: Animal Conservation and Welfare

Local Experience: Behind the scenes at the National Zoo

Travel-Study Opportunity: Desert Museum in Sonoma, AZ

Golden Lion Tamarin Project, Brazil

Colloquium Topic: Coral Reef Ecology

Local Trip: National Aquarium in Baltimore

Travel Study Opportunities: Australia, Belize

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In response to growing recognition of the increasing universality of higher education in America, the Association of American Colleges and Universities' national study, *Greater Expectations*, examined the state of higher education and made recommendations as "a nation goes to college."² In defining the principles of good practice in "the New Academy," the panel report states:

In this New Academy, colleges and universities will model the purposeful action—the intentionality—they expect of their students. Faculty members will focus more centrally on goals for student learning in both courses and programs, not just on the subject matter taught or the number of credits. Leaders will use resources strategically to build a culture centered on learning . . . Reaching ambitious goals for learning requires integrating elements of the curriculum traditionally treated as separate—general education, the major and electives—into coherent programs . . . to help each student create a plan of study leading to the essential outcomes of a twenty-first century education. (p. xiii)

The College Park Scholars curriculum was designed with general education learning outcomes in mind: effective communication skills (both written and oral); quantitative literacy and analytical reasoning; appreciation of diversity, and the ability to approach unstructured problems. The program was also designed to take maximum advantage of the academic strengths and diversity of a world-class research university. As described above, program directors are expected to pull existing courses "off the shelf," rather than create new courses for a small sub-set of students. By strategically selecting the courses that fulfill students general education requirements, by creating context through the one credit colloquia, and by actively advising students throughout the two-year program, the College Park Scholars program creates a coherent curriculum for undergraduate students, launching them toward their majors within the university, and into the constantly changing world ahead.

Endnotes

1. The specific instructions to students registering for the "Advocates for Children" program include the following guideline: In addition to the required colloquium, special section of English composition, and required mathematics course, *complete two courses from the following list*. These courses fulfill university "CORE" requirements. A suitable course may be substituted if approved by the director of the "Advocates for Children" program. Both courses must be completed by the end of semester 4.

CORE designations in parentheses:

CORE Literature: CMLT 270(D), ENGL 234(D), ENGL 250(D)

CORE Humanities: EDPA 210, PHIL 140

CORE Life Science: NFSC 100

CORE Social or Political History: AASP 100(D), HIST 211(D)

CORE Behavioral and Social Science: AASP 101, ANTH 260(D), ANTH 262(D), ECON 105, ECON 201, ECON 203, EDHD 230, GVPT 100, GVPT 170, PSYC 100, SOCY 100, SOCY 105, SOCY 227, URSP 100, WMST 200(D)

2. *Greater Expectations National Panel Report*, AACU, Washington, D. C. 2002

Learning Communities at the University of Michigan: The Best of Both Worlds

David Schoem
University of Michigan

The Michigan Learning Communities (MLC) at the University of Michigan are characterized by a more than forty-year history; a common framework with varied programmatic emphases, structures, and intellectual foci; and ongoing collaboration between academic affairs and student affairs units. These programs provide a large, diverse student body with a range of options that allow them to participate and learn in a large, public research university with the kind of personal attention that is similar, in many respects, to what students experience in small, liberal arts colleges.

In 1962, the University committed itself to its first learning community, the Residential College, and created the Pilot Program (now the Lloyd Hall Scholars Program) as a “pilot” for the Residential College. At that time, noted social psychologist Ted Newcomb wrote, “the lives of Michigan undergraduates were being unhappily divided into separate and unrelated experiences; the academic world of classroom, laboratory, and library, in contrast to the social world of the residence hall or other living arrangement on the periphery of the campus . . . Though the University has sought—even aggressively—to reach students’ minds in the classroom, it has rarely entered the social world of students other than in a mildly regulatory role” (Wunsch, 1966). Over time many new programs have been created, and while a small number have been short-lived,² eleven programs are in place at the present time.³

The College of Literature, Science and the Arts (LS&A) and University Housing at Michigan have been the primary sponsors of the Michigan Learning Communities, although more recently other units, such as the provost’s office and the College of Engineering, have served as sponsors as well. This sustained partnership between academic affairs and student affairs is unique and noteworthy within higher education.

All of the Michigan Learning Communities work in collaboration with a multitude of campus units, in addition to LS&A and Housing, bridging undergraduate initiatives and providing multiple areas of resources and support. These units include other professional/graduate schools and colleges, academic departments, the provost’s office, various units from the Office of the Vice President for Student Affairs, Undergraduate Admissions, Office of New Student Programs, Arts at Michigan, Academic Advising, Ginsberg Center for Community Service and Learning, Program on Intergroup Relations, Conflict and Community, Office of Academic and Multicultural Initiatives, University Library, Dialogues on Diversity, Arts of Citizenship, Sweetland Writing Center, Science Learning Center, Language Resource Center, and Math Lab.

The eleven learning communities share a great deal in common. Just as John O’Connor points out in this monograph’s introductory chapter, the University of Michigan talks about these programs as offering students the best of both worlds. The Michigan Learning Communities website (www.lsa.umich.edu/mlc) states,

*This sustained partnership
between academic affairs
and student affairs is unique
and noteworthy within
higher education.*

*The wide variation
among programs in their
purpose and structure provides
a range of intellectual
and social options and
opportunities that makes
for a good fit with the
substantial numbers of
students and faculty . . .*

“Michigan Learning Communities (MLC) combine the personal attention of a small college environment with the unparalleled resources of a large research university. Be a part of a friendly, supportive, and intellectually stimulating community while you take advantage of everything the larger Michigan campus has to offer.”

All of Michigan’s learning communities also promise the following:

(1) faculty-student interaction and intellectual engagement, (2) individual attention, lasting friendships and diverse communities, (3) learning inside and outside the classroom, (4) student involvement and student leadership, and (5) transition from high school to college.

Although all of the programs share these common features, some programs feature characteristics of curricular learning communities such as integrated courses, interdisciplinary collaboration among faculty from liberal arts and professional schools, and close faculty involvement with students, while others have few or none of these features. Many Michigan Learning Communities are residentially-based living-learning programs, including residential colleges, residential learning communities, and residential education programs (see Schoem, forthcoming 2004), but others are non-residential learning communities. Program emphases vary, including diversity and intercultural understanding, community service-learning, research, liberal arts, arts and writing, mentoring, health sciences, Germanic studies and culture, intensive academic support, and support for women interested in science and engineering. Course offerings and participation requirements vary extensively.

The wide variation among programs in their purpose and structure provides a range of intellectual and social options and opportunities that makes for a good fit with the substantial numbers of students and faculty in a large, public university. It also allows students and faculty to take advantage of the campus’ rich and expansive resources that are unique to a research university, in areas such as research opportunities, undergraduate and professional school faculty, student diversity, a wide range of courses and concentrations, vast library collections, visiting speakers, cultural offerings, technology, and co-curricular activities.

The eleven Michigan Learning Communities are described as follows:

1) The Comprehensive Studies Program (CSP), an academic support program, helps students succeed in a college environment filled with new demands and challenges. Through small, enriched courses, supplemental instruction, advising and counseling, CSP makes it easy for students to meet with faculty and talk with advisors about any subject. (www.lsa.umich.edu/csp)

2) The Health Science Scholars Program (HSSP), a residential program, introduces students to the broad array of health science fields for those who are considering careers in these areas. Participating colleges include Dentistry, Engineering, Nursing, Pharmacy, Kinesiology, Public Health, Medicine, Social Work, Information, and Literature, Science and the Arts. (www.lsa.umich.edu/mlc/hssp.html)

3) The Honors Program offers special depth and academic challenge to highly qualified students. Honors Housing is an option for students who wish to extend their intellectual lives beyond the classroom and live with like-minded

peers. Students who choose Honors Housing have close contact with other Honors students and all the diversity of the larger residence hall. (www.lsa.umich.edu/honors)

4) The Lloyd Hall Scholars Program (LHSP) is a residential program designed to ease the transition from high school to college. It combines the personal and academic advantages of a small liberal arts college experience with the nearly unlimited opportunities and resources of a world-class university. The focus of LHSP is communication and the arts. (www.lsa.umich.edu/lhsp)

5) The Max Kade German Residence Program is a residential program where undergraduates and graduates have the opportunity to learn and practice German in an informal setting. Participating in the program provides excellent preparation for study abroad, a summer internship, or to “re-acclimate” after spending time in a German-speaking country. (www.lsa.umich.edu/german/gsm-maxkade.html)

6) The Michigan Community Scholars Program (MCSP) integrates community service-learning and intercultural understanding and dialogue in a residential learning community. It emphasizes deep learning, engaged community, meaningful civic engagement, and a diverse, democratic environment. It has student leadership opportunities, co-curricular activities, faculty from across the entire university, community partners, and sponsorship of the Lives of Urban Children and Youth program. (www.lsa.umich.edu/mcs)

7) The Residential College (RC) is a four-year undergraduate liberal arts program with about 900 students and 60 faculty, situated within the College of Literature, Science and the Arts. The distinctive educational mission of the Residential College is to enable students to develop their intellectual interests and creative talents in an environment in which they can find their own voice and relate learning with doing. (www.rc.lsa.umich.edu)

8) The Undergraduate Research Opportunity Program (UROP) creates research partnerships between first- and second-year students and University of Michigan faculty. All schools and colleges of the University of Michigan are active participants in UROP, thereby providing a wealth of research topics from which a student can choose. Approximately 900 students and more than 600 faculty are engaged in research partnerships. (www.umich.edu/~urop)

9) The Undergraduate Research Opportunity Program—in Residence (UIR) provides an opportunity for students in the UROP program to work with faculty in leading-edge research and creative projects while living in a diverse, close-knit community. (www.umich.edu/~uir)

10) The University Mentorship Program helps first-year students with their transition to college and enriches the first-year experience. Groups of three students are matched with faculty/staff mentors and an upper-class student according to academic and extracurricular interests, to provide introductions to campus life and community resources. (www.onsp.umich.edu/mentorship)

11) The Women in Science and Engineering Residential Program (WISE-RP) provides camaraderie and support to women with academic and career interests in math, science, information technology, engineering, and medicine. It offers women the opportunity to live with and learn from others

(peers, faculty, and professionals) who have similar academic and career interests in order to enhance their success in the classroom, making friends and finding their niche on campus. (www.umich.edu/~wiserp)

The Michigan Learning Communities offer a personal and unique educational option and experience for every interested individual student in this large, public, research university. For those students (and faculty) who seek the best of both worlds, the Michigan Learning Communities have provided a very successful educational response for the past forty years.

End Notes

1. The author wishes to thank all of his colleagues in the Michigan Learning Communities for their helpful comments and suggestions in developing this portrait.
2. The College Community Program(s) and the 21st Century Program.
3. A twelfth learning community is scheduled to open in Fall 2003. The Adelia Cheever Program is planned for women from diverse backgrounds who wish to explore international leadership and civic responsibility in a supportive, home-like environment.

References

Michigan Learning Communities. www.lsa.umich.edu/mlc

Michigan Learning Communities: A Place for You. 2002. Ann Arbor: UM Marketing Communications

O'Connor, J., with others. 2003. *Learning Communities in Research Universities*. National Learning Communities Project Monograph Series. Olympia, WA: The Evergreen State College, Washington Center for Improving the Quality of Undergraduate Education, in cooperation with the American Association for Higher Education.

Schoem, David. Forthcoming. "Sustaining Living Learning Programs." *Learning Communities in Context: A Practical Guide to Sustaining Change, Expanding Support, and Improving Programs*. Jodi Levine Laufgraben and Nancy Shapiro, eds. San Francisco: Jossey-Bass.

Wunsch, Ellis. 1966. "The Pilot Program – An Attack on Impersonality and Academic Isolation in a Large College" *Memo to the Faculty*. Ann Arbor: Center for Research on Learning and Teaching, University of Michigan. No. 20.

New Century College: Connecting the Classroom to the World

*Karen Oates
New Century College
George Mason University*

George Mason University's New Century College was created in 1995 in response to a Virginia statewide call to colleges and universities to create degree programs and learning environments for the future. After almost two years of faculty-driven research and study, New Century College (NCC) was created as an experimental small college within a larger research university with the goal of developing curricular approaches to prepare students for the complexities of the future, effective pedagogies to promote student learning, and practices to connect students to the world around them. NCC provides the infrastructure across the university for continually incorporating new approaches, new partnerships, and challenges to the traditional models of learning.

NCC offers three degree programs: one for any self-selecting student committed to collaborative learning and competency-based education; one for adult, returning students; one for high-achieving honor students. Each degree allows the students to develop their own major or concentration with the guidance of a faculty advisor. Built on the learning community model, the first degree program, the BA/BS in Integrative Studies, was created to offer an integrative, whole student approach to learning that incorporated explicit competencies and experiential learning to "connect the classroom to the world." The Integrative Studies BA and BS degree consists of a general education learning community core, specializations in a variety of interdisciplinary subjects, and (for the first time on our campus) a requirement for experiential learning.

The typical NCC Integrative Studies degree captures the following five elements:

- a core freshman learning community cohort experience (32 credits)
- courses and learning communities in a concentration or pre-professional area of study
- a competency-based education with portfolio assessment
- community, team building and leadership experiences
- experiential learning (12-24 credits)

These elements fit together to create the base for a life long learning process centered on the students as learners and scholars.

1. A Core Freshman Learning Community Cohort Experience

The support and mentoring has made all the difference in my performance. All my teachers of learning communities devote a lot of time and energy to the success of their students.

The learning community provides a forum for students to come together in an academic environment to learn and relate to one another through common goals and shared experiences

—NCC Freshman, 2003

*NCC provides the
infrastructure across the
university for continually
incorporating new approaches,
new partnerships,
and challenges to the
traditional models of learning.*

*The freshman learning
communities are team-taught
and draw upon faculty
from various disciplinary
backgrounds from within NCC
and across the university.*

The first year consists of four, eight-credit integrated learning communities taken sequentially and collectively fulfilling almost all the university's general education requirements. Each first-year learning community is six to seven weeks long and meets four days a week for four to five hours per day. The freshman learning communities are generally referred to as "units" because of the intentional integration of the four-unit pieces to form the first-year curriculum.

The freshman cohort (approximately 180 to 200 students, eighteen to nineteen years in age) can be described as typical first-year students who arrive at the university seeking a connection and leave at the end of the academic year as a confident, well-established community of learners. The advantages of the cohort program include:

- time for deeper, in-depth study that intentionally builds on previous courses and common reading,
- close student faculty interactions and mentoring with time and space for activities such as daylong or multi-day field trips,
- yearlong writing and technology assignments that provide students the opportunity to work towards the competencies, and
- the building of a strong intellectual and social community commitment to NCC, the university and their program of study.

The freshman learning communities are team-taught and draw upon faculty from various disciplinary backgrounds from within NCC and across the university. Faculty who join the college do so with the promise of a shared and collaborative governance system, unprecedented university attention to utilizing the Boyer Model of Scholarship in Promotion and tenure decisions, and a flexible system to respond to opportunities and new initiatives as they present themselves.

2. Courses and Learning Communities in a Specialization or Pre-professional Area of Study

The most positive aspect of NCC I believe is the personal involvement in the curriculum. I feel that I have made a large contribution to my learning and it helps a great deal with the learning process . . . One can accomplish their goals and get the degree they the way they want to, within reason.

—NCC Senior, 2002

The New Century College Integrative study concentration is the equivalent of the major in the traditional degree programs. Students create, with the advice and mentoring of their academic advisor, a program of study to fit their particular interests and needs. They construct an interdisciplinary, integrated concentration by combining NCC upper-level learning communities, individual courses outside the college in traditional disciplines, and experiential learning (specifically service-learning, co-ops, and internships in the field of study) in New Century College. Some students develop a unique concentration; others follow a path

developed by others, including flexible programs of study in the pre-professions area of teacher education, pre-medical, and law studies. Upper-level learning communities are designed to both support and strengthen the concentrations and provide active, collaborative, integrative learning experiences for all students. Examples of upper-level learning community topics include “Community Health and Research,” “Epic Creations,” “Mysteries of Migration,” “Vision Quest,” “Violence and Gender,” and “The World Since 1920.” Broad areas of study that are popular among students include conflict resolution, new media, and conservation studies.

3. A Competency-Based Education

As a graduating senior, I am glad to say that I have a degree that helped and guided me to achieve more than just reading and writing. It is more like experiencing, understanding, putting my thoughts into perspective. I can't believe I actually finished my graduation portfolio.
—Graduating senior, 2002

The faculty believes that a successful undergraduate requires more than the ability to master complex bodies of knowledge or the accumulation of a certain number of credit hours. From the freshman experience to the capstone course, NCC's Integrative Studies students are mounting and providing evidence that they are gaining competency in nine different areas: communications, valuing, effective citizenship, critical thinking, group interaction, aesthetic response, information technology, global perspective, and problem solving (see Alverno College, www.alverno.edu).

Each competency is evaluated through portfolio submissions at the end of the first year and then again at the completion of the concentration. The portfolio evaluation is part of the graduation and degree requirements for the college. Faculty have worked hard over several years to develop a systematic rubric to assess each level of competency and provide feedback and mentoring to students as they develop their story as a learner. Each year the portfolio guidelines and rubric for assessment are re-examined and modified as needed. Students demonstrate their growing mastery of the competencies through assignments, projects, reflections, self-assessments, and the reflective practice of creating the portfolio itself.

4. Community, Team Building and Leadership Experiences

The students in NCC feel part of a community, which is a special feeling, one that is not gained throughout the traditional university classes. Besides learning leadership, I learned about my self. I learned how to handle situations and was able to reflect on my strengths as a leader.
—NCC Sophomore, 2002

*The faculty believes
that a successful undergraduate
requires more than the
ability to master complex
bodies of knowledge . . .*

*Through collaborative,
active learning assignments
that make students responsible
for each other's success . . .*

Integrative Studies learning communities are intentionally designed to create an active, collaborative approach to learning that fosters student understanding, voice, self-authorship, and leadership. The freshman cohort and students in the upper-division learning communities are consistently challenged to build an academic community within and among students. Through collaborative, active learning assignments that make students responsible for each other's success, faculty encourage students to develop and express their leadership and effective citizenship skills. Community-based research projects, service-learning, and mentoring activities are created within learning communities to foster connections among student team members and the communities they serve. Leadership, team, and community building are some of the natural outgrowths of this engaged community. Administered by NCC, the university certificate in leadership is a twenty-four-credit-hour program that provides both a broad understanding (the theory) through the study of leadership in contemporary times and the environment for students to acquire and practice ethical leadership through community engagements and service-learning (the practice).

5. Experiential Learning

*All Integrative Studies students
participate in at least
twelve-credit-hours
of experiential education
prior to graduation.*

Experiential education also promotes responsibility, for the student only learns if he or she puts effort into the experience. The difference between the effort put into these classes and the traditional classes is that students are able to actually enjoy the learning experience. service-learning without civic engagements is like a factory without power. The structure is capable of great things, but without the energy it can only do a fraction of its potential.

—NCC Junior, 2003

Experiential education plays a central role in the development of knowledge, understanding, and application beyond the theories and information gleaned through the classroom and text. Through experiential education and the many partnerships for education forged by the college with corporations and civic organizations, students connect their study to the workplace and the world. Immediate concrete experiences become the bases for reflection and integration of classroom knowledge. All Integrative Studies students participate in at least twelve-credit-hours of experiential education prior to graduation. Faculty who teach in the college undergo tutoring and mentoring by our Center for Service and Leadership, and senior faculty who have been involved in experiential education help them develop, implement, and assess student learning outcomes. Experiential education can take the form of internships, co-op programs, service-learning, community-based research projects, field study, mentoring and tutoring, as well as study abroad and community projects. New Century College's motto is "Connecting the Classroom to the World." Students and faculty alike participate in partnerships with government agencies, local and regional businesses, nonprofit organizations, the public school systems and associations, as well as local clubs and political parties to enrich and apply knowledge and forge connections for a deeper understanding.

The creation of New Century College as a small college within the larger research university was a great experiment for George Mason University. Since its inception in 1995, New Century College has changed and is continually molded by internal and external forces. From a once independent college reporting directly to the provost to a college within a college reporting through an Arts and Science dean to the provost, the same spirit of innovation and intentionality remains. It is the combination of both the faculty and student entrepreneurial spirit that continues to ensure a vibrant, engaging learning community program. I believe that whatever the future holds for New Century College, and whatever the political environments becomes, the community of faculty and student learners are determined to continue their work and to celebrate the tenth anniversary of the creation of the college in 2005 with a gala event! For more information: www.ncc.gmu.edu.