



THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

MAKING CRITICAL CONNECTIONS

QUALITY ENHANCEMENT PLAN

EXCELLENCE AT CAROLINA
SACS REAFFIRMATION PROCESS
APRIL 2006



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Executive Summary

The University of North Carolina at Chapel Hill is a major research university with a strong and dynamic roster of activities for learning and advancement, not only on campus but also throughout the state and indeed around the world. While students at UNC-Chapel Hill have traditionally been educated in the various academic disciplines within departments, Carolina has long recognized the value of experiential learning as well as crossing traditional disciplinary boundaries. Some of today's foremost educational challenges -- such as helping students learn approaches to solving complex problems and develop talents for lifelong learning -- have interdisciplinary and experiential dimensions. Some of these needs are met by offering interdisciplinary majors, programs, and courses, of which the University already provides many vibrant options. Others are provided by scholarly activities facilitated by units such as the Office of Undergraduate Research and the Study Abroad Office. Addressing them more fully requires marshalling the resources of the entire University and the community in which it is situated.

During the past three years, we have revised our undergraduate curriculum in part to respond to these challenges. The new General Education Curriculum, to be implemented in fall 2006, includes a series of curricular requirements to ensure that students develop *foundations* (the skills needed to communicate effectively both in English and another language, to apply quantitative reasoning skills in context, and to develop habits that will lead to a healthy life), explore *approaches* (a broad experience with the methods and results of the most widely employed approaches to knowledge), and *make connections* to these foundations and approaches in their programs of study. The ability to make connections also helps students integrate these foundations and approaches in ways that transcend traditional boundaries, as well as to create pathways from the campus to local, national, and worldwide communities.

The curriculum stands at the center of the academic life of the University. So, how can the learning expected inside the classroom (where the curriculum is typically based) connect to what happens outside it? The launch of a new General Education curriculum offers the University an unusually good opportunity to make such connections, and we have thus made this one focus of our Quality Enhancement Plan. **Making Critical Connections** will help the University implement the new curriculum in such a way that research and internationalization become critical components of everything we do.

One critical connection involves the link between the curriculum and one of the major activities in which the faculty and professional staff participate: *research*. Our intellectual community is defined by the fact that faculty are involved in a wide range of undergraduate programs, are committed to training master's and doctoral students, and also are engaged in their own research and scholarly activity. If any of these three elements were to be abandoned, UNC-Chapel Hill would no longer be a comprehensive major research university. Nor would the University contain "communities of learners" where "the shared goals of investigation and discovery bind together the disparate elements to create a sense of wholeness" (*The Boyer Commission Report on Educating Undergraduates*, p. 9).

The University of North Carolina at Chapel Hill is working to make research, mentored scholarship, and creative performance even more distinctive features of a Carolina

undergraduate education. The provision of “high quality undergraduate instruction to *students within a community engaged in original inquiry and creative expression*” (emphasis added) has been an explicit part of the University’s mission statement since 1994.

At times, the emphasis on research at the University has threatened to separate faculty from undergraduate students and graduate from undergraduate education, to the detriment of all. **Making Critical Connections** offers us the opportunity to encourage our undergraduate students to be full participants in the intellectual life of our university and to engage in the research culture that surrounds them on our campus. Students who have experienced inquiry and discovery will be well prepared to address future unsolved problems and to assume important roles as enlightened citizens and leaders in our increasingly interconnected world.

Another way to help students make critical connections is by further internationalizing the undergraduate experience at Carolina. Global citizenship requires an understanding of the cultural interaction between nations and the mutual impact felt around the world by such exchanges. We define internationalization “as the process of integrating an intercultural and global dimension into the purpose and function of education at UNC-Chapel Hill in a manner consistent with both our core values as a public institution and the furtherance of a sense of global citizenship among our intramural and extramural constituents.” Thus, another critical connection is that from the curriculum to internationalization.

In order to allow more students to exploit these connections, the following recommendations will be among those pursued:

- In the Curriculum:
 - Establish an innovative scheduling alternative, such as a “Maymester.” This intersession option, which would likely be administered by the University’s well-established Summer School Office, would allow faculty members to spend a concentrated period (three weeks under the current scenario) with a group of undergraduate students, either on- or off-campus. Team taught and interdisciplinary courses will be encouraged.
 - Create a “Connections Center” on campus whose mission would be to foster the ability of faculty and students to make connections between the many opportunities for learning that occur daily throughout the campus and those available in the region, state, nation, and world. The Connections Center would promote a new learning vision that seeks to break down traditional barriers -- between curricular and “co-curricular” education, between research and teaching, between local and global perspectives -- by viewing the entire student experience as a venue for student learning.
- In the Research Area:
 - Establish a series of linked courses across the disciplines to introduce students to unsolved problems, help them understand multiple modes of inquiry, and enable them to conduct original work in newly established “Research Tracks.” We will increase the profile of research and the number of course offerings in which students carry out original research projects through the creation of four new term “Research Professorships,” one in each of the divisions of the College of Arts and Sciences.

- Increase the number of qualified mentors for undergraduate students who wish to engage in research.
- In the International Arena:
 - Improve the infrastructure for international activities, which will in turn increase support for international research and enhance the learning and educational environment for students and faculty.
 - Embed internationalization into the curriculum as deeply as possible as a means of extending global opportunities to members of the Carolina community. To broaden the international presence on campus, the University will increase the number of international faculty, postdoctoral fellows, graduate students, and undergraduate students.
 - Encourage undergraduate students to travel and study abroad.

In recent years, the faculty and administration have asked a number of questions about the intellectual environment on campus. What can be done to break down the barriers that too often exist between undergraduate students and graduate and professional school students? How might the departments in Academic Affairs and Health Affairs work together more productively? How can faculty, with their considerable research expertise, find new ways to introduce undergraduates to the delights of discovery and the wonders of new knowledge? How can the scholarly community on our campus more deeply integrate research, scholarship, and creative activities into the undergraduate curriculum? How can we eliminate the walls that so often separate local activities from international programs, thus hindering students from a fuller understanding of “foreign” ideas and cultures?

The University of North Carolina at Chapel Hill believes that **Making Critical Connections** will go a long way toward answering these questions.



Quality Enhancement Plan Selection and Development Process

Selection Process

The elements of the Quality Enhancement Plan (QEP) for the University of North Carolina at Chapel Hill, **Making Critical Connections**, were identified in early 2004 by the University's SACS Leadership Team, in consultation with the following groups: the Chancellor's Advisory Committee; the Executive Committee of the Faculty Council; the Faculty Council; the Employee Forum; the Council of Chairs; the Deans; the Vice-Chancellors; faculty members individually and in groups; and in meetings with groups of graduate and undergraduate students.

Bernadette Gray-Little (at that time the Executive Associate Provost and a member of the Leadership Team) invited the University community to suggest ideas for UNC-Chapel Hill's Quality Enhancement Plan. The following general themes emerged and were presented to a meeting of the Faculty Council on February 13, 2004 (See Appendix B).

- A. Making Connections:** This QEP initiative, using the title of the University's recently revised undergraduate curriculum (to be implemented in the fall of 2006), would expand on the University's new curriculum opportunities to include connections across the curriculum, interdisciplinary efforts among faculty to enhance learning and research, and ways in which connections with communities (local, regional, national, and international) could enhance student learning.
- B. Explicit Focus on Internationalization:** As a QEP topic, this focus would include many of the activities overseen by the Associate Provost for International Affairs, including the following: creating a long-term plan for making the University a leading international university; generating resources to fund international research, teaching, and service; identifying ways and means for providing resources for international programs; and facilitating the coordination of international activities across campus.
- C. Innovative Teaching and Learning Strategies:** A QEP focus on innovative teaching would invite an evaluation of teaching and learning strategies throughout all disciplines and levels of instruction, with an added focus on innovation and effectiveness.
- D. Honor and Integrity:** This topic would expand upon the excellent set of discussions and activities associated with the University's existing honor and integrity initiatives, including the influence that honor and integrity have on the teaching and learning process.
- E. Implementing and Evaluating the General Education Curriculum:** A QEP focus on this very ambitious project (in which the University is already engaged) would be a commitment to study the effects of the new curriculum and to incorporate the findings into continuous improvement of the new General Education requirements.
- F. Developing Undergraduate Research Programs:** The University's undergraduate research office has been in existence for less than five years. However, it has already played an important role in cataloging, celebrating, and raising the profile of undergraduate research in ways that highlight the important work of the faculty and graduate students across the campus. A QEP devoted to this topic would reaffirm the University's commitment to undergraduate research as an essential aspect of the undergraduate experience.

- G. Nurturing the Arts across the Curriculum:** With the development of the University's "arts corridor," the recently completed renovation of Memorial Hall, and the increased use of the Ackland Art Museum as a resource for teaching by many departments, a QEP focusing on a trans-curricular approach to the arts would give the University an opportunity to ask once again how the arts might be better emphasized in student learning.
- H. Develop a Plan to Assess Growth in Student Learning:** As a QEP, this topic would include a careful assessment of how students learn and what they learn during their time at the University.
- I. Carolina as an Entrepreneurial Learning Environment:** An increasing number of UNC-Chapel Hill faculty are involved in research, evaluation, and/or teaching efforts that not only contribute to the social and economic well-being of the region, but also present opportunities for commercial development. A QEP centered on entrepreneurship would both refine and expand these efforts.
- J. Assess the Impact of the University's Contributions on the State and Society:** The University of North Carolina at Chapel Hill often acknowledges its identity and responsibilities as a "public" university. But how exactly does the University contribute to the state and to society at large? A QEP on this topic would attempt to gauge the tangible and intangible contributions that the University makes through its teaching, research, and public engagement activities.

A majority of the February 2004 meeting of the Faculty Council was devoted to a discussion of these themes, with those in attendance expressing a great deal of interest in the ideas outlined above. At the end of the discussion of the Quality Enhancement Plan, informal ballots were provided and members of the council as well as other faculty members in attendance (Faculty Council meetings are also meetings of the General Faculty) were asked to indicate a preference. Those present were asked to share the information with their colleagues and to ask them to submit preferences via e-mail.

During this informal balloting process, other ideas for a Quality Enhancement Plan were presented including:

- Enhancing student self-learning through a variety of independent student-centered learning activities.
- Ensuring that students are highly competent in thinking, reasoning, and communication skills (written and oral).
- Developing skills for lifelong learning, critical thinking, etc.
- Ensuring that the free exchange of ideas on campus continues to be encouraged and protected.

Among the Quality Enhancement Plan possibilities considered at the February 2004 meeting of the Faculty Council, the following were most often mentioned: the "Connections" portion of the new curriculum; internationalization; research activities throughout the University; and the impact of the University on the state and on society at large.

In late spring 2004, the Leadership Team considered which of the Quality Enhancement Plan proposals would have the most impact on students' learning and on the University community as a whole. The leadership group also refined possible case statements for internationalization, research, and the interdisciplinary requirements in the new curriculum. Because the research

mission of the University had already addressed this topic in a serious way (research was the focus of the University's SACS self-study in 1985), the Leadership Team turned its attention to the other suggested topics. Preparations for implementing and assessing the new General Education curriculum were already underway, as were efforts to grapple with internationally-based activities. However, when considering these central and important ideas, the possibility of having a tripartite Quality Enhancement Plan emerged as the leading choice.

This initial Quality Enhancement Plan case statement was adopted by the Leadership Team on April 14, 2004, and circulated beginning April 15, 2004. The one-page summary was presented to the Faculty Council on April 23, 2004, to the Employee Forum on June 2, 2004, and provided to the leadership of Student Government and to the Graduate and Professional Student Federation.

Numerous efforts were made -- through various meetings and forums -- to inform and involve the University community with presentations to the Deans Council (September 2, 2004), Faculty Council (September 3, 2004), Student Affairs Directors (September 16, 2004), Board of Trustees (September 23, 2004), Chancellor's Cabinet (September 28, 2004), College of Arts and Sciences Chair's Retreat (October 8, 2004), and the College of Arts and Sciences Directors of Undergraduate Education (October 29, 2004), among others (See Appendix A).

As mentioned earlier, the title of the University's Quality Enhancement Plan, **Making Critical Connections**, is based on the name for the new General Education curriculum, which will be implemented in fall 2006. The new curriculum contains requirements to ensure that students develop *foundations* (the skills necessary for communicating effectively both in English and another language, for applying quantitative reasoning skills in context, and developing healthy behaviors), explore *approaches* (broad experiences with the methods and results of a variety of approaches to knowledge), and *make connections* to these foundations and approaches within their programs of study. These connections are also intended to help students transcend traditional disciplinary boundaries by integrating these intellectual foundations and approaches.

The Quality Enhancement Plan chosen by the Leadership Team on behalf of the University, after wide and appropriate consultation, encompasses several of the elements mentioned during the initial round of discussions. The plan builds upon the student learning outcome of "making connections" enshrined in the new General Education curriculum, works seamlessly with the long-term goals set out in the University's Academic Plan and Financial Plan, and sets forth recognizable and sustainable activities in which much of the University community can be actively involved.

The academic life of the University is centered on the curriculum. Launching a new set of General Education requirements is a major undertaking, especially when the curriculum revision emphasizes connecting the learning expected inside the classroom (where the curriculum is typically based) to what happens outside it. One way of making such a critical connection is to link the curriculum to one of the major activities in which the faculty and professional staff participate: *research*. The addition of an experiential education requirement to the curriculum is a pointed and important addition to the core content of a baccalaureate degree in the twenty-first century.

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
Quality Enhancement Plan Selection and Development Process

Through the implementation of both the Quality Enhancement Plan and the new set of General Education requirements, the University of North Carolina at Chapel Hill is committed to making research, mentored scholarship, and creative performance even more distinctive features of a Carolina undergraduate education than ever before.

Another way to help students make critical connections is by further *internationalizing* the undergraduate experience at UNC-Chapel Hill. Carolina's students, as members of an increasingly complex world community, are truly citizens of the world. Their successful participation in the world requires an understanding of the cultural interaction between nations and the mutual impact felt around the world by such exchanges. By defining internationalization as "the process of integrating an intercultural and global dimension into the purpose and function of education at UNC-Chapel Hill in a manner consistent with both our core values as a public institution and the furtherance of a sense of global citizenship among our intramural and extramural constituents," the University extends yet another critical connection from the curriculum to internationalization.

The statement of the University's Quality Enhancement Plan on the following page was adopted by the SACS Leadership Team on April 14, 2004, and used as the basis for the work of committees devoted to each area of the University's tripartite Quality Enhancement Plan. Bobbi Owen, Professor of Dramatic Art and Senior Associate Dean for Undergraduate Education in the College of Arts and Sciences and a member of the SACS Leadership Team, was appointed by the Chancellor to coordinate the entire effort.

Once the three committees began meeting, slight modifications were made to the wording of the initial statement and approved by the Leadership Team.

Quality Enhancement Plan: Making Critical Connections Case Statement

Adopted April 14, 2004

The curriculum, international presence, and research experiences for undergraduates at the University of North Carolina at Chapel Hill are the basis for the Quality Enhancement Plan that will be presented for review by the SACS Reaffirmation team in spring 2006.

These areas demonstrate the University's commitment to interdisciplinary work, support for diversity, reliance on ethical behavior, and commitment to public engagement. The proposed enhancements will extend the positive influence of honor and integrity on the teaching and learning process to student involvement in research and discovery both within and beyond the campus. The connections between Academic and Health Affairs, between graduate and undergraduate students, and among research, teaching, and service for the faculty and staff, will all be examined before the visit by the SACS re-accreditation team in spring 2006. Beginning in fall 2004, committees comprised of faculty, staff and students will study each area and make recommendations for ways to focus on and enhance these areas well into the future.

Curricular Innovation: The revised undergraduate curriculum, effective fall 2006, includes a requirement to connect the foundations (composition and rhetoric, quantitative reasoning, foreign language, lifetime fitness) and approaches (physical and life sciences, social and behavioral sciences, humanities and fine arts) in ways that eliminate traditional boundaries and allow unrestricted movement from the campus community into other ones - local, regional, national, and international. Intended to help undergraduates understand that what they learn in a specific course is not knowledge in isolation but part of a larger construct, "making connections" also suggests an important strategy for the entire University. Plans to enhance the curriculum would be created as would ways to evaluate its implementation.

Internationalization: The range of activities throughout the entire University (Health Affairs, Academic Affairs, Continuing Education, etc.) devoted to global issues could be identified and long-term plans for enhancing the University's status as a leading international university would be created. In addition, short-term projects would begin, existing ones would be coordinated, and the resources necessary to fund international research, teaching, and service on a larger scale would be identified.

Research: Enhancing the research experience for undergraduates is important for everyone in the University community. UNC's growth in extramural research funding is a valuable asset that might be drawn upon to provide additional opportunities to undergraduates whose strong pre-college preparation makes them eager for research opportunities and interaction with faculty, graduate students, and professional staff. Increasing the number of students involved in basic and applied research, with departmental honors programs, and who are attending and making presentations at national meetings are significant goals. The proposed programs would ensure that undergraduates are welcomed into the communities of performance, scholarship and research that comprise our campus, that our students learn to make creative contributions to these disciplines, and that our graduates are well prepared to face future unsolved problems with confidence and enthusiasm.

Development Process

Beginning with the fall 2004 semester, committees comprised of faculty, staff, and students began to refine and elaborate each of the three areas in the tripartite Quality Enhancement Plan. Three separate groups -- one each to focus on the undergraduate curriculum, internationalization, and research -- were formed. Each committee was chaired by an experienced faculty member specifically involved in the area under consideration and each of these faculty members joined with Professor Owen to form the overall steering committee. The committee chairs were:

- Dr. Sue Goodman, Bank of America Distinguished Professor of Mathematics, led the committee on curricular innovation. Dr. Goodman served on the Curriculum Review Steering Committee (2001-2003) that proposed the new set of General Education requirements being implemented in fall 2006.
- Dr. Patricia Pukkila, Associate Professor of Biology and Director of the Office of Undergraduate Research, led the committee on research.
- Dr. Peter Coclanis, Albert R. Newsome Professor of History and Associate Provost for International Affairs, led the committee on internationalization.

Committee members were appointed by the Chancellor after consultation with the Leadership Team and committee chairs. Faculty, staff, and students (undergraduate and graduate) were represented on the committees.

Curriculum Component: The Curricular Innovation Committee met regularly throughout the 2004-2005 academic year and consulted with faculty and administrators across campus, including James Murphy, Director of the Summer School. Members of the committee sought information from other campuses, among them the University of Virginia, where an intersession was launched in winter 2004-2005. The committee closely followed the deliberations surrounding the implementation of the new General Education requirements, and consulted with key decision-makers such as the Curriculum Revision Implementation Committee, the Administrative Board of the College of Arts and Sciences, and the Educational Policy Committee.

Undergraduate Research Component: The Undergraduate Research committee was formed in the fall 2004 semester and included two undergraduate students, three graduate students, fourteen faculty members, and four staff members. The committee featured a balanced representation among the disciplines, particularly among the faculty members. The committee, which included representatives from Academic Advising and Scholarships and Student Aid, met frequently during the 2004-2005 academic year, and continued to develop plans and ideas during the fall 2005 semester. As the committee's discussions evolved, several committee members also solicited ideas from colleagues on integrating undergraduate research into the curriculum. In addition they consulted with the Dean of the Summer School, the Director of the Center for Teaching and Learning, and the Assistant Provost for Institutional Research and Assessment.

Internationalization Component: The Internationalization committee met five times between December 2004 and April 2005, while handling other committee business via listserv and e-

mail communications. During summer 2005 the committee chair (Peter Coclanis) drafted the International Committee's report, completing it in early August. After hearing from the committee members, he wrote another draft of the report (completed in late September) which reflected suggestions and recommendations made to the committee. After the three public forums, a slightly modified third draft of the report was written, reflecting comments made during the fall by students, faculty, staff, and the SACS Leadership Committee.

Assessment Committee: Members of the QEP Assessment Committee, chaired by Dr. Lynn Williford, Assistant Provost for Institutional Research and Assessment, served as consultants to the three committees as they worked to develop proposals for initiatives with measurable learning outcomes. Once drafts reports were available, the committee began its work of creating an overall assessment plan that would generate data for both formative and summative evaluations. This group, which also developed the assessment plan for the new General Education curriculum, worked to ensure continuity between the data collection strategies and timelines of the new curriculum implementation and the QEP. In addition, specific measures appropriate for evaluating the impact on student learning of the specific initiatives within the three areas of the QEP were also created in consultation with each of the **Making Critical Connections** committees.

Consultation with the University Community

The three committee chairs and Professor Owen met on a regular basis and also corresponded via e-mail while the three committees worked on their specific areas, in order to keep the tripartite plan coordinated. Owen also attended many of the meetings held by the Curriculum, Research, and International committees and corresponded regularly with each of the committee chairs as their ideas emerged in each of the areas.

After the completion of the draft committee reports in summer 2005, Professor Owen began the process of collating the three reports into one document, corresponding as needed with each of the committee chairs. A three-page executive summary was created, distributed, and discussed during three campus-wide forums attended by committee members and led by the chairs of the three committees. The forums were open to all, but one (October 13, 2005) was targeted specifically to students. The other two were designed for faculty and staff, with one held on the Health Affairs area of campus (October 25, 2005) and the other on the Academic Affairs portion of campus (October 27, 2005).

Feedback received during these three sessions (as well as from e-mails received due to advertisements and other publicity) was incorporated into the reports, which were then shared with the Leadership Team.

Similar to the strategy used during the selection process, much effort was made to keep the University community aware of the Quality Enhancement Plan as it was developing. The QEP executive summary was disseminated among various University constituencies at nine meetings between August 2005 and February 2006. These included meetings of the Vice-Chancellors (August 30, 2005), Council of Chairs in the College of Arts and Sciences (September 8, 2005), Faculty Council (September 16, 2005; October 14, 2005; February 24, 2006), Deans' Council (October 6, 2005), Board of Trustees (January 27, 2006), Student Government (January 31,

2006), Graduate and Professional Student Federation (January 31, 2006), and the Employee Forum (February 1, 2006), among others.

Compliance with SACS Criteria

The opportunity to create a Quality Enhancement Plan that looks ahead and affects the learning environment for all students at the University is a welcome one. Quality Enhancement Plans at many colleges and universities have a single theme on which they focus, but the complexity of a major research university such as the University of North Carolina at Chapel Hill makes us feel that embracing an equally complex Quality Enhancement Plan would be appropriate. **Making Critical Connections** will allow us to affect the student learning environment at the University in three key areas.

The University of North Carolina at Chapel Hill has met all the criteria established by the Southern Association of Colleges and Schools for selecting a Quality Enhancement Plan. The University's plan, **Making Critical Connections**, does so in the following ways:

- It addresses issues related to student learning.
- It addresses critical and strategic issues and is integrated with the University's on-going planning and evaluation processes, including the Measures of Excellence and the Academic Plan.
- It addresses institutional priorities discovered through a needs assessment involving the entire University community to discover what issues were paramount and which ones needed resolution.
- Both the decision about the focus and its implementation engage the academic community, through the campus-based initiatives devoted to the education of our undergraduate students, increasing internationalization efforts, and research.
- The University has the capacity to implement this plan -- and indeed will make a commitment to it with ideas, personnel, and appropriate funding.
- The University is committed to the plan for a minimum of five years, with the expectation that many facets of it will continue to be important long into the future.

Implementation of the QEP

Now that the University's 2006 Quality Enhancement Plan is complete, it is time to implement **Making Critical Connections**. The campus visit by the SACS review team will offer the University an opportunity to receive valuable feedback about the plan. We are preparing a series of questions for the review team in order to take advantage of their expertise.

The unit at the University with the largest undergraduate population is the College of Arts and Sciences. Therefore, the responsibility for the implementation of **Making Critical Connections** will be delegated from the Provost and Chancellor to the Dean of the College of Arts and Sciences. The Dean will be asked to appoint and charge an Implementation Committee as soon as the Quality Enhancement Plan has been approved by the SACS on-site review committee in April 2006.

Because **Making Critical Connections** is a tripartite initiative, it is appropriate for the Dean of the College of Arts and Sciences to include on the Implementation Committee the heads of the three offices/organizations with the most direct responsibility (or their designees). These areas are: the curriculum (Associate Dean for Undergraduate Curriculum, currently Dr. Jay Smith), internationalization (Associate Provost for International Affairs, currently Dr. Peter Coclanis), and research (Director of the Office of Undergraduate Research, currently Dr. Patricia Pukkila). With the Maymester a central feature of this entire initiative, the Dean of the Summer School (currently Dr. James Murphy) should also be on the implementation committee. The emphasis on assessment also warrants the inclusion of the Assistant Provost for Institutional Research and Assessment (currently Dr. Lynn Williford). In addition, faculty and professional staff members from outside the College should be appointed including representatives from Health Affairs and the Division of Student Affairs.

Reports will be made annually to the Faculty Council, the Chancellor's Cabinet, and the University Affairs Committee of the Board of Trustees, among others. A five-year report will be provided to SACS in 2011.

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Curricular Innovation

Overview

The University of North Carolina at Chapel Hill approved a new General Education curriculum in April 2003 and will implement it beginning with first-year students entering the University in August 2006. A primary goal of the three-year, campus-wide review process was to create a General Education curriculum that is less fragmented and more integrated. As the report about the new curriculum stated, "The undergraduate experience aims to foster in Carolina graduates the curiosity, initiative, integrity, and adaptability requisite for success in the complex, demanding environment of the twenty-first century world."

To that end, the General Education curriculum has three components: Foundations, Approaches, and Connections. The third component -- *to encourage and enhance opportunities for undergraduate students to make connections* -- is an important and novel feature of the new curriculum and is the focus of the curricular innovation portion of the Quality Enhancement Plan. The University of North Carolina at Chapel Hill wants its students to understand that what they learn in a specific course is not knowledge in isolation, but rather knowledge that is richly contextualized. These opportunities require varying degrees of resource allocation, ranging from reconfiguring existing campus activities to implementing new initiatives (e.g., building a website to highlight interdisciplinary opportunities) to inaugurating focused connection-oriented activities (e.g., establishing intensive educational experiences focused on interdisciplinary learning).

The most innovative aspect of the new General Education curriculum is the creation of an interdisciplinary cluster program. These *three-course clusters* would be linked by a thematic focus (for example, courses in Biology, Religious Studies, and Sociology could focus on evolution theory). Designed and taught by faculty members from different departments, the concept of clustering or linking courses to highlight connections across disciplines offers tremendous potential for making connections in a focused way.

Another way to encourage students to focus on a single theme is through a short, intensive, integrative learning experience, in which students are isolated from the daily demands of multiple courses and co-curricular activities. Students would focus on a given topic, do work in the field or community, and have the opportunity for concentrated research and extended discussion. Intensive short sessions have provided a unique learning experience for students at other universities. The initial response from Carolina students, at forums presenting various short session models, has been encouraging.

Many existing integrative-learning opportunities on campus would be greatly enhanced by highlighting the many connections that students are already making. Some areas could no doubt be singled out for special enhancement. To that end, we propose an initiative to foster the integration of all dimensions of student learning and to bring opportunities for making critical connections to every student on the UNC-Chapel Hill campus.

Academic advisors will play a vital role in providing guidance as students plan and manage their course of study in the new curriculum. They will make students aware of the many opportunities to make the connections. Advisors already assist the undergraduate student population to attain their personal and educational goals and objectives. They educate students about the curriculum requirements and suggest various ways for students to take advantage of innovative educational opportunities. The crucial role of academic advisors should be further recognized, supported, and advanced by the University's faculty and administration.

Objectives

- I. Establish a Connections Center to foster the integration of all dimensions of students learning. The Connections Center would support, promote, and generate involvement in new and existing initiatives.**
 - Advocate for initiatives by faculty members to increase interdisciplinary activity.
 - Create (and maintain) a dynamic and interactive student learning website and promote the use of listserv software to establish and foster groups of individuals who share a common academically-oriented interest.
 - Coordinate a connections colloquium series that would be promoted broadly, supported with appropriate funding, and digitally recorded for subsequent use by the University community.
 - Index courses in a searchable database to allow students to find courses that are relevant to the connections they are trying to make.

- II. Launch an innovative scheduling alternative: the Maymester.**
 - Extend the mission of the Summer School to include administrative support for the Maymester, an intensive two- or three-week session. Students would earn three (or perhaps as many as four credits) in a single Maymester session.
 - Once the Maymester has been successfully piloted and launched, other scheduling alternatives (including Submesters and Integrated Clusters) should be explored.
 - Establish valid one-credit courses that encourage students to make connections between curricular and experiential modes of learning.

- III. Develop the Interdisciplinary Cluster Program as a viable option for satisfying the supplemental General Education requirement for B.A. students in the College of Arts and Sciences.**
 - Provide the necessary means and encouragement for the coordination and scheduling of the interdisciplinary cluster program.
 - Provide cluster development grants to foster the creation of three-course clusters that focus on a single theme.

- IV. Increase the number of full-time advisors and support their efforts to guide and assist undergraduates in the integration of the new curriculum and all aspects of student academic planning.**
 - Hire an additional team of advisors in the Academic Advising Program.
 - Strengthen the relationship between the advising provided in academic departments and the professional advisors in the Academic Advising Program in order to keep juniors and seniors connected to the Academic Advising Program.

Connections in the New Curriculum

BACKGROUND

The General Education curriculum in force since 1982 was adopted in 1980. Reviews conducted in 1990 and 1996 reaffirmed the goals and character of the University's undergraduate curriculum while making recommendations for revisions (not all of which were fully implemented). The 1995 institutional self-study, "All Useful Learning," recommended a comprehensive review and rethinking of the General Education curriculum, a call that was echoed by others on campus. In response, the Dean of the College of Arts and Sciences formed the Curriculum Review Steering Committee and gave it the following mandate:

- The Curriculum Review Committee is charged to examine the present undergraduate General Education curriculum and propose what revisions, modifications, or transformations it deems necessary to accomplish the University's mission for undergraduate education.
- The Committee shall examine all curricular requirements in the General College and the College of Arts and Sciences outside the major and minor fields of study.
- In this examination, the Committee is charged to consider all aspects that it deems relevant of the academic experience associated with fulfilling those requirements.

In response to this charge, the Steering Committee began by formulating a mission statement concerning the aims of undergraduate education:

The University of North Carolina at Chapel Hill strives to cultivate the skills, knowledge, values, and habits that will allow graduates to lead personally enriching and socially responsible lives as effective citizens of rapidly changing, richly diverse, and increasingly interconnected local, national, and worldwide communities. The undergraduate experience aims to foster in Carolina graduates the curiosity, initiative, integrity, and adaptability requisite for success in the complex, demanding environment of the twenty-first century world.

To this end our curriculum seeks to provide for all students: (1) the fundamental skills that will facilitate future learning; (2) broad experience with the methods and results of the most widely employed approaches to knowledge; (3) a sense of how one might integrate these approaches to knowledge in a way that can cross traditional disciplinary boundaries; and (4) a thorough grounding in one particular subject. The General Education Curriculum focuses on the first three of these curricular goals; the undergraduate major is dedicated to the fourth.

The General Education curriculum review process at UNC-Chapel Hill began in fall 2000 with public forums at which students, faculty, and alumni were asked to consider the question, "*What is an educated person?*" A Curriculum Review Committee consisting of twelve faculty members and two students was established in January 2001. The committee surveyed students and faculty in all General Education courses during the spring 2001 semester and consulted with faculty members, administrators, alumni, and students. The committee established expected outcomes for the new General Education curriculum and appointed sixteen satellite sub-committees to consider particular aspects of the curriculum. The draft proposal was submitted for review to the Administrative Boards of the General College and the College of Arts and

Sciences and to the Educational Policy Committee. It was also discussed at Arts and Sciences faculty meetings in April 2002 and October 2002 and at a student forum in October 2002. The Faculty Council approved the proposal in April 2003. The new curriculum will be implemented beginning with students entering the University in fall 2006.

The Curriculum Review Steering Committee found from its survey results and discussions that students and advisors viewed the relationship between the lower level General College requirements and the upper level Arts and Sciences requirements as ambiguous and unclear. In the new curriculum, the Distributive and Integrative Options for B.A. students are designed to resolve these difficulties. The Distributive and Integrative Options offer students a curriculum that is better integrated with studies in their major while also allowing them to pursue their own interests within the rich variety of courses available at the University. This goal is more effectively addressed by replacing the existing upper level Perspective requirements with two options: a Distributive Option that asks students to move beyond their major field of study to take courses from three different divisions, and an Integrative Option that provides a focused interdisciplinary experience.

Fragmentation was also seen as a problem with the current curriculum, because there was little continuity between the various requirements. The new curriculum focuses on students' making connections at all levels. Students will be required to apply, refine, and extend their foundational skills in communication and quantitative reasoning throughout their course of study. While the 1980 curriculum was focused on campus and classroom experiences, the new curriculum seeks to create pathways from the campus to local, regional, national, and global communities. It integrates into General Education varied efforts to encourage students to move beyond the classroom -- in study abroad, undergraduate research, fieldwork, internships, and service learning.

In order to create a more integrated curriculum at the University, the new General Education curriculum has three primary objectives:

- **Foundations:** Students must have the skills needed to communicate effectively in English and another language, and apply quantitative reasoning skills in context, as well as develop strategies for lifetime physical fitness.
- **Approaches:** Students must experience the methods and results of the most widely employed approaches to knowledge, including the natural sciences, the social and behavioral sciences, and the humanities and fine arts.
- **Connections:** Students must learn to integrate the foundations and approaches in ways that cross traditional disciplinary boundaries.

The third objective -- to encourage and enhance opportunities for undergraduate students to make critical connections -- is an important and innovative feature of the new curriculum and was the focus of the Curricular Innovation Subcommittee's proposals. To help achieve that objective, the new curriculum includes requirements designed to result in several major student learning outcomes:

Specific “Connections” Requirements

To meet the learning outcome goals, students will be required to satisfy several specific requirements:

- **Communication:** Students will learn how to write and speak more proficiently in their chosen discipline. They will achieve this outcome by taking a communication-intensive course beyond the “Foundations” requirement. Communication-intensive courses must meet strict standards for the amount of writing and speaking required. Students can use a course in their major department to satisfy this requirement.
- **Quantitative Methods:** Students will learn to think critically about the numerical information they encounter daily. They must take an additional course (beyond Foundations) that shows them how quantitative reasoning can be used in their own discipline or another field of study.
- **Experiential Education:** Students will acquire firsthand experiences and learn how to invigorate academic inquiry and direct it into new channels. Students may fulfill this requirement by completing a service-learning course; a fieldwork or research course; a substantial research experience under a faculty member’s supervision; a study-abroad program; an internship; or a practice-oriented course in the creative arts.
- **U.S. Diversity:** Students will gain an understanding of ethnic, racial, religious, and cultural diversity. They must complete a course that includes interactions between at least two subcultures in the United States.
- **The North Atlantic World:** Students will learn the history and culture of the world in which they are currently living. They may fulfill this requirement by completing a course that focuses on North America and Western Europe.
- **Beyond the North Atlantic:** Students will learn how knowledge of the history, geography, and culture of other regions is necessary for effective citizenship. They must complete a course on a region that focuses on a region other than North America and Western Europe.
- **The World Before 1750:** Students will learn how the pre-modern world was significantly different from our own and how pre-modern ideas, practices, and institutions continue to influence our contemporary world. They may fulfill this requirement by completing a course that covers a chronological period before 1750.
- **Global Issues:** Students will learn how global issues such as the flow of information, transnational migration, and economic interdependence, shape cultural life. Students must complete at least one course that examines the cultural interaction between two or more regions and/or analyzes transregional dynamics of global forces.

Supplemental General Education Requirements

In addition to the above requirements, students who seek B.A. degrees in the College of Arts and Sciences must elect to take an additional nine hours of course work, which can be satisfied in one of two ways, a *distributive* or an *integrative* option:

- **The Distributive Option: Crossing Divisions:** Students choosing this option must take three additional courses numbered above 199, one from each of the Divisions of the College of Arts and Sciences outside the one in which their major resides. This will ensure that students will complete at least three courses in physical and life sciences, at least four in social and behavioral sciences, at least three in the humanities, and at least two in the fine arts.

- **The Integrative Option: Interdisciplinary Clusters.** This innovative aspect of the new General Education curriculum is designed to ensure that students will learn to make connections as they cross disciplinary boundaries to solve problems. Students choose an interdisciplinary “cluster program” providing nine hours (usually in three courses) that are linked in some way and that focus on a single theme. At least two Divisions or Schools must be represented in the student’s cluster of courses. All of these courses must be above the introductory level and one of the courses may be used in a student’s primary major.

ENHANCING CONNECTIONS AT UNC-CHAPEL HILL: CURRENT CURRICULAR AND CO-CURRICULAR UNDERGRADUATE ENGAGEMENT

The Quality Enhancement Plan provides an opportunity to expand and reinforce some of the changes that have been made in the new set of General Education requirements. For many decades the University of North Carolina at Chapel Hill has provided a strong and dynamic array of activities for research and reflection. Historically, disciplines have been developed in departmental settings as major centers of training for students. The University has also long recognized the value of experiential learning. The challenges of solving complex problems and developing talents for lifelong learning in the twenty-first century have interdisciplinary and experiential dimensions that must be supported by the resources of the entire University and the community in which it is situated. Some of these needs are met by offering interdisciplinary majors, programs, and courses. Here the University provides many vibrant options.

A key institution on campus already engaged in making critical connections is the Johnston Center for Undergraduate Excellence, which houses the Office for Undergraduate Research, the Robertson Scholarship Program, the Honors Program, and Burch Field Research Seminars. Events such as the “Thursdays on the Terrace” performance series, the Frank Porter Graham Lectures, and the Undergraduate Multimedia Festival are already making important contributions to integrative learning at the University. The Johnston Center has also supported interdisciplinary teaching programs that bring students and faculty together to collaborate on intellectual questions of mutual interest. To a large extent, the overarching plan to enhance the curriculum is an extension of this already fruitful enterprise.

The Carolina Environmental Program also supports this kind of “connectedness.” The Albemarle Ecological Field Site in eastern North Carolina supports place-based, focused research projects that bring diverse faculty and community members together for a semester-long field research centered on real world problem solving.

Many existing activities provide significant opportunities for students to connect their curricular learning with other experiences on campus; however, the opportunities will not be fully realized without more active integration and coordination. Examples include the following:

- Classroom experiences could be systematically coordinated with events in the Sonja Haynes Stone Black Cultural Center, the Ackland Art Museum, the Paul Green Theatre, the Morehead Planetarium, Memorial Hall, and other venues on- and off-campus.
- Student resources -- such as the Student Union, Student Stores, *The Daily Tar Heel*, and the Campus Y -- already serve as vital crossroads for undergraduate activities. These might be used in innovative ways to enhance connections between traditional learning and practice.

- Services for students (including Academic Advising, the A.P.P.L.E.S. service learning program, the Environmental Resource Program, career services, health services, and learning support centers) could be tapped to expand student learning.
- Recent advancements in instructional technology can be used to foster integration of knowledge. The University Libraries have provided new databases that make research accessible to students in powerful ways. Video conferencing is a potent means of making connections between the academic community at Chapel Hill and the various civic and educational communities around the state. Such connections provide the means for inter-institutional collaboration that can make dynamic connections between learners throughout the UNC System and across the entire globe.

RECOMMENDED INITIATIVES

I. Establish a Connections Center

Among the goals of the QEP is to highlight the many connections that students are already making on campus and to select areas to emphasize for special enhancement. Towards this end, *we propose the establishment of a new Connections Center on campus whose mission would be to foster the integration of all dimensions of student learning.* On-campus activities and off-campus links supplement the curriculum by helping undergraduates make critical connections between classroom knowledge and their overall learning experience. By viewing the totality of student experience as the matrix for learning, this office would help to establish a new educational vision that more deeply integrates curricular and extra-curricular activities. A center dedicated to this purpose will promote dynamic connections that are already being made, and foster the development of new links among the many educational opportunities at UNC-Chapel Hill. Designating a director -- perhaps an assistant dean or a "Connections Czar" -- and providing that person with dedicated staff is necessary in order to both focus attention on the learning activities and opportunities on campus and to integrate the extensive potential of this innovative vision. While some administration would be necessary, the critical role of this center would be to advocate, promote, and generate involvement in new and existing initiatives. The office would advocate for faculty members seeking to create innovative learning initiatives in curricular and experiential arenas.

One option might be to merge the new Connections Center with the existing activities of the University's Center for Teaching and Learning, while another might be to create the Connections Center within the Office of Undergraduate Education where responsibility for the undergraduate curriculum resides. Locating the Center in the Student Union might foster interest among the students and increase their interaction.

The following ancillary initiatives could also be under the auspices of the Connections Center:

Connections Website

A critical element in providing a connected learning environment is making students and faculty aware of the many opportunities on campus. The creation and maintenance of a dynamic and interactive website that functions more effectively than the campus calendar would provide a nexus and a clearinghouse for campus, departmental, and student activities. A better search

engine is also needed on the University website to help students make more discriminating connections.

Connections Colloquium Series

Most departments have an ongoing colloquium series that is primarily “in-house.” Many of the colloquia would be of broader interest if students were made aware of opportunities and encouraged to take advantage of these opportunities. At a minimum, colloquia could be publicized more broadly, particularly colloquia that have potential for enhancing critical connections. To encourage departmental commitment to this process, appropriate colloquia could be given a special designation, promoted broadly, supported by University funds, and digitally recorded for subsequent use by the University community. This added level of support would encourage departments to be aggressive in pursuing important speakers, particularly those who are likely to bridge disciplines and subspecialties. Furthermore, with adequate warning and access to previously recorded talks, faculty would be encouraged to enhance and expand courses along transdisciplinary lines and perhaps to mandate attendance at relevant academic events. When viewed from afar, this commitment to intellectual climate would send an important message to prospective students regarding UNC-Chapel Hill’s focus on enhancing critical connections.

Communities of Common Interest via Listservs

Courses and public events can foster critical connections, but at some level interpersonal relations and community sensibilities are likely to be relevant. The primary need is to help members of communities of common interest find each other. To that end, UNC-Chapel Hill should promote the use of listserv software to establish and foster groups of individuals who share a common interest. A mechanism should be established so that individuals can announce a plan to establish a new community of common interest on a more or less specific topic (e.g., World War II, altruism, or Picasso). This announcement would go to the broader University community, and interested parties could opt in by joining a listserv. Subsequent development would be listserv-specific. At a minimum, listserv members would keep each other informed regarding relevant events, use the listserv to post queries, or seek feedback on ideas. More advanced listservs might engage in online discussion and debate. Finally, listservs might eventually move “off the page” and lead to other events, courses, and intellectual products.

Indexed Course Listings

From a practical perspective, it is important to allow students who seek critical connections across courses to be able to find courses that are relevant. One solution is to establish descriptive terms for existing courses and list them in a searchable database that links terms to courses. For example, a student interested in World War II might be aware of courses in History, but fail to notice relevant offerings in Sociology, Political Science, or Geography. A student interested in the work of Pablo Picasso might notice courses in Art, but fail to notice relevant work on aesthetics in Psychology, Philosophy, or Physics.

II and III. Foster Learning Connections through Interdisciplinary Clusters, Innovative Scheduling Alternatives, and One-Credit Courses

The committee reviewed three structural approaches for implementing cluster-oriented educational experiences (the Interdisciplinary Cluster Program), interdisciplinary courses, and innovative scheduling alternatives for providing short, intense, and cross-linked courses (Maymasters, Submasters, and Integrated Clusters). In addition, the committee considered the value of one-credit courses.

Integrative Option: Interdisciplinary Clusters

The first and more traditional approach takes advantage of current courses and new courses generated according to the interests of individual faculty members. This approach, present in the curriculum review adopted by the University, involves the identification and explicit association of standard courses that can be linked by subject matter and treatment. We believe that with a modest degree of coordinated design and execution among the course instructors, this approach will represent a valuable first step toward enhancing student and faculty awareness of interdisciplinary connections. We recognize the value of this approach and *recommend that the University provide the necessary means and encouragement for the identification, coordination, and scheduling of the Interdisciplinary Cluster Program*. We believe that effective a priori clusters can be either faculty-generated or student-identified.

The integrative option offers tremendous potential for making connections across disciplines in a focused way. Two or more professors in a course or cluster of courses would no doubt bring different perspectives to a single topic. The ensuing dialogue would enable students to confront different ways a topic can be understood, and would ensure that the disciplinary perspectives will be balanced and bring a richer experience than can be presented by a single professor. Through their dialogues with their professors, students will come to know the scholarly activity of their professors, and will see how mature thinkers pursue knowledge. This will often be the first time that many students will be presented with a model for their own intellectual development.

Interdisciplinary Classes

A second approach to the use of clusters is represented by courses that are inherently interdisciplinary. The committee considered a range of such course approaches offered at other institutions. Interdisciplinary courses are effective, but most programs reviewed were relatively limited in the number of students served. In addition, the heavy demand for creating a large number of entirely new course offerings was viewed by the committee as impractical.

Innovative Scheduling Alternatives

The third approach was the one most favored by the committee, and the one that we recommend: *to provide short, intensive, and cross-linked courses in which students are exclusively engaged*. The prospect of engaging students in brief, intensive, and integrative learning experiences during which they are not distracted by the daily demands of balancing courses and extracurricular activities has considerable merit. An intensive course (or courses) that are a student's sole focus for a time would provide the ideal environment for focusing on

many facets of a single theme, while still allowing time for reflection and exploration. Students would remain centered on a given topic, do work in the field or community, and have the opportunity for concentrated research and extended discussion. The committee was so convinced of the value of this approach that it recommends: *(1) that an innovative scheduling alternative be implemented; (2) that the University (most likely the College of Arts and Sciences and the Summer School) identify and provide the necessary administrative support structure; and (3) that one or more of these alternatives be made available to students under the new General Education curriculum.*

The first model of an intensive course echoes an approach that has been growing in popularity at other institutions in recent years. This model uses a short session outside the regular academic year during which students are totally immersed in the course. Short sessions are typically offered as a January intersession or as an intensive learning experience in the summer. A January intersession poses difficulties at UNC-Chapel Hill for two reasons. First, the time between the end-of-the-year holiday period and the opening of the spring semester is too short for an intersession. Second, the University's academic calendar must be in synch with Duke University's calendar to accommodate the inter-institutional Robertson Scholars program. An intensive summer experience, dubbed a "Maymester," would have no such scheduling difficulty. If the Maymester were scheduled during the first three weeks of the first summer session, students and faculty could still reserve most of the summer for their customary activities.

There are two other possibilities that provide alternative forms of a block system within the regular academic semester. They are the "Submester" and "Integrated Cluster" models, each of which presents their own advantages and challenges. Details about these options are provided in Appendix F.

The Maymester model is the innovation that can be most quickly and profitably implemented at UNC-Chapel Hill. A Maymester would entail the creation of a number of intensive three-week courses constructed explicitly to expose students to the connections among different ways of learning. The Maymester would start at the beginning (or in advance) of the first summer session and last for three weeks. Each Maymester course would consist of 2.5 contact hours per day for five days per week to confer three credit hours. To ensure that the students who enroll in a Maymester course would benefit from the intensive nature of that course, students would be allowed to take only one Maymester course at a time and could not simultaneously enroll in other courses.

The Maymester model offers many advantages, both pedagogical and practical. The more intensive exposure of students to course material would allow both greater focus and the opportunity for exploratory learning. The longer daily contact and absence of concurrent courses competing for student time and attention would provide more opportunities for non-traditional course design built around experiential-, field- and travel-based learning. Maymester courses would avoid the logistical problems associated with team teaching during the academic year. In addition, Maymester courses could be administered through the Summer School without additional administrative costs. Nine-month faculty members teaching a Maymester course would receive additional salary, and the Maymester approach could be pilot-tested relatively easily with a modest number of course offerings. The committee acknowledged that Maymester courses would require additional costs to students by being outside the regular academic year as is the case with summer school. The courses offered, which must be suitable

to the more intensive learning schedule, might have to be specially adapted from existing courses or newly designed in order to meet the integrative learning requirement. None of these issues appeared to be significant barriers to carrying out the Maymester approach.

One-Credit Courses

An innovative proposal for creating connections between curricular and experiential modes of learning without the need for extensive restructuring would be to expand the options for one-credit courses. Currently, one-credit options are available for laboratories, internships, and service learning projects that support the content of traditional courses. For example the C-START program in the Honors Program enables undergraduates to study a topic in enough depth and offer -- under close faculty supervision -- a one-unit elective open to their undergraduate classmates. A new one-credit SPCL (Special) course supported by the Office of Undergraduate Research focuses on "Modes of Inquiry," wherein selected professors share their methodologies and the paths they followed in gaining their expertise. These models generate dynamic awareness of the linked ways of knowing that occur on the campus every day. Clear criteria for one-credit courses should be based upon one-third of the requirements for a regular undergraduate offering. This detailed template could be used by departments to create "micro-seminars" and other one-credit curricular offerings that encourage undergraduates to make their own critical connections. The content and contact time would be restricted during the semester, thus enabling (and possibly requiring) creative scheduling of courses during evening and weekend hours.

Additional Considerations

- Courses meeting the intensive, integrative approach will most often be newly designed to emphasize the connections sought in the new General Education curriculum and to meet the intensive character and opportunities of those frameworks for learning. Staff support will be necessary to facilitate the course development effort, coordinate offerings, support aspects of experiential courses, and to assist in the evaluation of the intensive course programs.
- The new integrative option will place special demands on the cross-disciplinary expertise of faculty members, and it will be important for faculty to have that expertise enhanced if students are to benefit fully from the integrative option. Therefore, faculty members teaching Maymester (and the Submester and/or Integrated Cluster models if implemented) offerings should have one-course release time to allow them to audit a regular course in a different discipline potentially linked to their own offering. This release time to audit should be available at intervals as often as once every five years as long as the faculty member continues to offer these scheduling alternatives.
- Faculty members who regularly teach an intensive connections course should be expected to offer the course on a regular basis.
- Course and/or cluster development awards -- either as academic year release time or as summer awards -- will be needed.

IV. Strengthen Support for Academic Advising

High-quality academic advising can make the difference between meeting a set of curriculum requirements and having a truly meaningful and integrated educational experience. From the

time students first begin to consider the University as a place to pursue their field of study and throughout their undergraduate careers, students talk with advisors to get information about academic majors, curriculum requirements, educational opportunities, and campus resources, making choices that have implications for their careers and their lives. Advisors are partners with students as they devise and manage their programs of study, asking questions that help students explore connections between their course requirements, major disciplines, and career goals.

All undergraduates are required to meet with an advisor in the Academic Advising Program in their first two years at Carolina, while they are in the General College. Students are assigned to an advising team which consists of an Assistant Dean, a Senior Advisor and three full-time advisors (supported by an office assistant) according to their interest in a particular field or major. After they declare a major, during the second semester of their sophomore year, they are advised **and** mentored by faculty members who serve as departmental advisors. Formal mechanisms should be developed to strengthen the relationship between the advising provided in academic departments and that offered by the professional advisors in the Academic Advising Program. The departmental role is particularly important as it relates to courses in the major but expertise is not always available in academic units concerning the other requirements for graduation.

With the implementation of the new curriculum and new initiatives, the critical role of advising will be heightened. Toward this end, we *recommend hiring at least one additional team of full-time advisors* (Assistant Dean, Senior Advisor, three advisors and one support staff) who will guide and assist undergraduates in the integration of the new curricular options into all aspects of their academic careers.

All new first-year students are required to attend a summer orientation program. It is here that students and their parents learn about the mission of the University's General Education curriculum. **Making Critical Connections** should be a prominent and recurrent theme as the students are introduced to the life of the University -- in orientation videos, welcoming addresses, initial advising appointments, and peer counseling.

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Undergraduate Research

Overview

The University of North Carolina at Chapel Hill is committed to making research, mentored scholarship, and creative performance distinctive features of undergraduate education at the University. The provision of “high quality undergraduate instruction to *students within a community engaged in original inquiry and creative expression*” (emphasis added) has been an explicit part of the University’s mission statement since 1994. Our intellectual community is defined by the fact that faculty members are involved in a wide range of undergraduate programs, are committed to training master’s and doctoral students, and also are engaged in their own research and scholarly activity. If any of these fundamental tasks were to be abandoned, we would no longer be a Research-Extensive university. Ideally, universities such as ours are “communities of learners” where “the shared goals of investigation and discovery should bind together the disparate elements to create a sense of wholeness” (*Boyer Commission Report on Educating Undergraduates*, p. 9).

In reality, the emphasis on research at large research-extensive universities has at times separated faculty from undergraduates and graduate education from undergraduate education, to the detriment of all. The development of a Quality Enhancement Plan (QEP) offers UNC-Chapel Hill the opportunity to design mechanisms that will enable our undergraduates to become full participants in the intellectual life of the University, and to engage in the research culture that surrounds them on our vibrant campus. Our QEP, **Making Critical Connections**, will encourage students to refine their interests, to find out how discoveries are made through “hands on” learning, and to discuss their research findings with others. We believe that students who have experienced inquiry and discovery are well prepared to address future unsolved problems and to assume important roles as enlightened citizens and leaders.

In 1997, the Chancellor’s Task Force on Intellectual Climate released a report that described several ways in which our University was failing to engage enough of its students in a satisfying and powerful intellectual life sufficient to address the pressing needs of society (a crucial role for a public university). The report also outlined several interrelated strategies for effecting change. An important recommendation of the Intellectual Climate report was the creation of an Office of Undergraduate Research (OUR) at the University to expand opportunities for active, mentored learning experiences for undergraduates. The mission of the Office of Undergraduate Research, which was established in 1999, is to help all undergraduates engage in research, scholarship, and creative performance both inside and outside the classroom.

The past several years have seen considerable national attention directed to undergraduate education in research universities in general, and to the important role of undergraduate research in particular. At a 2002 national meeting on undergraduate research organized by the Reinvention Center, Carolyn Ash Merkel, Director of Student-Faculty Programs at the California Institute of Technology, spoke of the factors enabling undergraduate learning through inquiry and research to flourish on some campuses but not on others. In her view, a “culture of undergraduate research” is necessary in which administrators, faculty, and students each

play important roles in defining and articulating the shared values and benefits of widespread student participation in the university's research mission. Merkel also pointed out that changing academic culture is a challenging and lengthy process (*Undergraduate Research and Scholarship and the Mission of the Research University Conference Proceedings*, pp. 43-46). UNC-Chapel Hill, along with many excellent research universities, has embraced this challenge, and signs of progress abound. Undergraduate research is part of the recently released Academic Plan and an important component of the new General Education curriculum. **Making Critical Connections** offers all of us the opportunity to make undergraduate research a seamless part of the culture at the University of North Carolina at Chapel Hill.

Objectives

If undergraduate engagement in the University's research mission is to become a defining feature of an undergraduate education at UNC-Chapel Hill, the many constituencies who comprise our community will each have important roles. The *staff and administration* must offer ongoing support to undergraduate research programs and incorporate the expectation of undergraduate involvement in original research and scholarship into the messages they convey to the public. *Faculty members* should welcome opportunities to mentor undergraduates, appreciate the effectiveness of this mode of teaching, and feel valued and rewarded for these activities. *Graduate students and postdoctoral fellows* will need to develop their mentoring skills, and view working with undergraduates as an important part of their professional development. *Undergraduate students* must arrive here with the expectation of engaging in original work, learning how to find the opportunities that match their interests, and of being welcomed into the communities of performance, scholarship, and research that comprise our campus.

To enable these groups to embrace their essential roles, the committee recommends the following:

- I. **Appoint four current UNC-Chapel Hill faculty members to terms as "Undergraduate Research Professors" to support and expand undergraduate research opportunities in all disciplines.**
- II. **Establish several series of linked courses ("Research Tracks") across the disciplines to introduce students to unsolved problems, help them understand multiple modes of inquiry, and enable them to conduct original work.**
 - Identify existing courses that can serve as model research tracks.
 - Invite faculty members to design new research tracks and/or modify their courses to contribute to one or more research tracks.
 - Investigate ways in which course clusters (proposed for the new General Education curriculum) and "Maymesters" (discussed in the Curriculum Innovation section of this document) can facilitate the implementation of research tracks.

III. Increase the number of course offerings in which students carry out original research projects using Graduate Research Consultants.

IV. Enhance the opportunities for undergraduate students to be mentored in original research.

- Offer workshops to prepare graduate students and postdoctoral fellows to become effective mentors to undergraduate students. In addition, mechanisms must be created to give formal recognition to these mentors and to compensate them in an appropriate manner.
- Expand the Summer Undergraduate Research Fellowship (SURF) program.
- Undertake department level planning to increase undergraduate involvement in experiential education and research (including the appointment of “Undergraduate Research Liaisons”) and to develop formal mechanisms to acknowledge faculty members who mentor undergraduate students.

Undergraduate Research

BACKGROUND

The University of North Carolina at Chapel Hill has long been known for the high quality of its undergraduate offerings. There is a rich tradition at the University of undergraduate research and collaboration among faculty, postdoctoral fellows, graduate students, and undergraduates in many departments on campus. Indeed, in some disciplines (such as Art, Music, and Creative Writing) fostering students’ creative abilities has historically been at the heart of the educational process in these programs. However, incorporating undergraduate participation is more problematic in other disciplines. Even the language used to describe undergraduate involvement in original work can vary sharply among disciplines. There was also a lack of campus-wide emphasis on undergraduate scholarship beyond the Honors Program prior to the issuance of the Chancellor’s Intellectual Climate Task Force report in 1997. In response to that report, the Office of Undergraduate Research (OUR) was created in 1999 to help all University students to engage in research. Over the past six years, the Office of Undergraduate Research has not only accumulated valuable information concerning how faculty and students view undergraduate scholarship, but has also developed a series of programs to increase the number of undergraduate participants and to draw both local and national attention to undergraduate accomplishments (Pukkila, Taylor, and Gray-Little, 2001). Since many elements of **Making Critical Connections** draw on this experience, the history of the Office of Undergraduate Research and the development of its programs are summarized below.

Initial Departmental Interviews

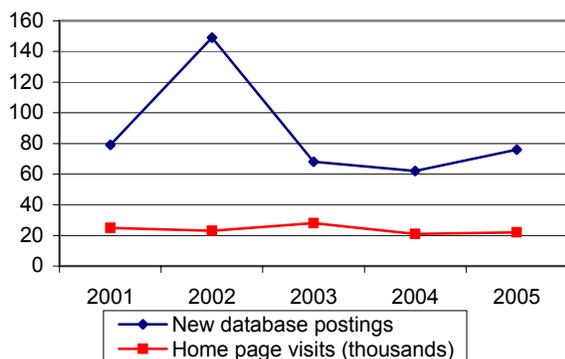
To best understand the undergraduate research strengths of existing programs and ways they might be expanded, the Office of Undergraduate Research interviewed a representative from each department (either the Chair or the Director of Undergraduate Studies) during 1999 (the inaugural year). The interviews focused on how departments define undergraduate research and scholarship, and how those experiences are structured. Based on these conversations, the Office of Undergraduate Research concluded that nearly all departments have mechanisms in place to encourage mentored, self-directed work that enables individual students or small

groups of students to explore an issue of interest to them. In all disciplines these research experiences involve student creativity and communication of the results to others. In addition, the experiences involve inquiry, design, investigation, research, scholarship, discovery, application and/or performance to a greater or lesser degrees depending upon the topic. There is also often an immediate connection to a local, national, or international issue, and an increasing appreciation of multidisciplinary approaches.

Faculty members generally view their mentoring of undergraduates as a deeply satisfactory form of teaching, although one that requires a major commitment of time and resources. Undergraduates are uniformly positive about these experiences, and conclude that they have lasting value. For example, an alumnus who returned to UNC-Chapel Hill as a faculty member wrote: *“It was only after joining a research lab [as an undergraduate] that I felt the thrill of discovering something that has never been realized before. I have carried the excitement derived from my undergraduate research through graduate school at Berkeley, my postdoctoral studies at Stanford, and will continue to carry it for the rest of my life as a scientist.”*

Office of Undergraduate Research Website

To help direct undergraduates to the opportunities available to them, the Office of Undergraduate Research created a website for students and faculty (www.unc.edu/depts/our)

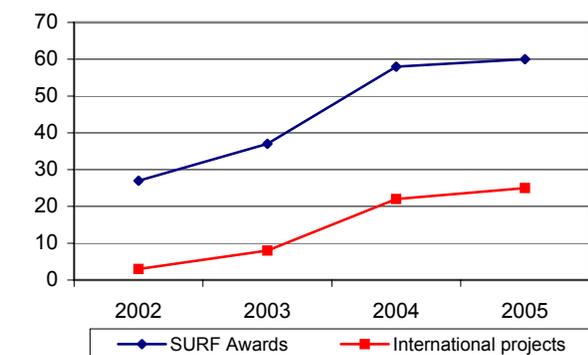
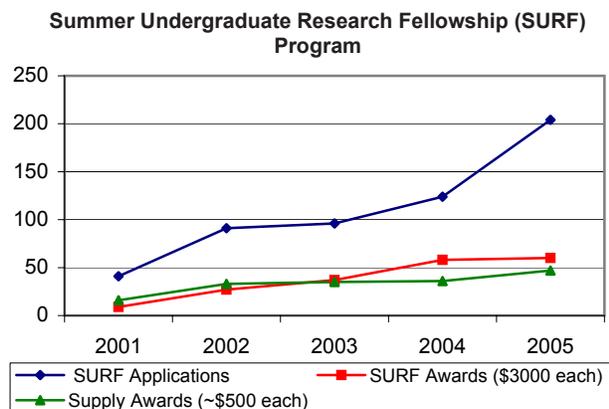


that offers information about departmental programs and how to get started in original research and scholarship. The website also includes a flexible database of research opportunities where faculty, graduate students, and postdoctoral students can “invite” undergraduate participation either for course credit, for pay, or for work as a volunteer. These resources continue to be utilized by the campus community, as indicated here. Note that only visits to the Office of Undergraduate Research homepage are tracked, so the numbers simply

reflect yearly trends rather than an actual number of visits. (Many students respond to postings with links to internal pages.) The postings remain on the website until faculty members ask that they be removed. In January 2006 there were 291 positions advertised on the website.

Undergraduate Research Fellowships and Supply Awards

Barriers to increased participation in undergraduate research that were identified in 1999 include sufficient financial support to students during the summer (so that they do not need to spend all their time earning money to defray their college expenses) as well as funds for essential research supplies and related expenses during the school year. Through a combination of grants from foundations, government agencies, and individual donors, the

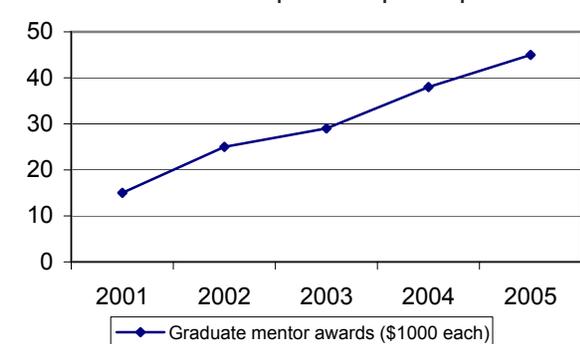


Office of Undergraduate Research has been able to reimburse students for their out-of-pocket research and travel expenses, and also increase the financial support for the Summer Undergraduate Research Fellowship (SURF) program. However, the demand for the summer fellowships has always exceeded the supply, particularly in recent years. The Office of Undergraduate Research will continue to seek expanded financial support for undergraduate research. For example, the Office of Undergraduate Research began a program in 2004 to assist faculty holding grants from the National Science Foundation (NSF) to apply for NSF supplemental awards to support undergraduate research projects (the “Research Experiences for Undergraduates” program). Interest in entrepreneurial projects (designed to produce products of tangible value) and in international projects continues to increase. **Making Critical Connections** will help potential donors understand the value of these experiences, especially as increasing numbers of students and faculty come to expect them. In

addition, the rising interest in conducting research abroad (as illustrated at left) is appropriate for a campus such as ours which has an increasing focus on internationalization, as discussed elsewhere in **Making Critical Connections**.

Graduate Mentor Awards

Another barrier to expanded participation in undergraduate research identified in 1999 was the lack of enough qualified mentors beyond a core group of faculty members.



The Office of Undergraduate Research initiated a collaboration with the Graduate School, reasoning that learning to supervise the work of others is an important component of graduate professional development. The Office of Undergraduate Research has offered a series of workshops to help graduate students prepare for their roles as mentors (with the

advice and supervision of the faculty) and has offered modest compensation to these graduate student mentors (Pukkila and Milgram, 2001). Interest in the program continues to increase, as illustrated here. While a number of graduate students have asked to formally mentor additional students, the program has been limited to a single award per graduate student due to lack of funds. This focus on the graduate-undergraduate interaction takes advantage of the unique climate of a Research-Extensive university, and has received considerable national attention (*Undergraduate Research and Scholarship and the Mission of the Research University Conference Proceedings*, pp. 21-24). The Office of Undergraduate Research also collaborates with the Office of Postdoctoral Services, since many postdoctoral fellows have expressed an interest in preparing to become more effective mentors of undergraduates. Postdoctoral fellows are encouraged to post research opportunities for undergraduates, and workshops on mentoring have been organized by the Office of Postdoctoral Services and the allied Postdoctoral Association. Unfortunately, to date the Office of Undergraduate Research has been unable to extend the mentor awards to include postdoctoral students due to the lack of sufficient funding.

Graduate Research Consultants for Undergraduate Courses

At the time the Office of Undergraduate Research was established, it was recognized that there was a need to support faculty members across the campus who wished to integrate more research and “inquiry-based” pedagogy into their courses. One of the responsibilities of the founding director of the Office of Undergraduate Research was to develop such support mechanisms. This combination of focusing both outside and inside the classroom is unusual among undergraduate research programs, but has served our campus well. In 2003, the Office of Undergraduate Research Director and the Director of Curriculum Development in the Center for Teaching and Learning met with a small group of faculty in the social sciences to ask what mechanisms could be developed to encourage faculty to introduce research experiences for students into their courses. The group concluded that faculty members might be encouraged to convert existing “course projects” (which usually result in a term paper) into research projects undertaken by teams of students in the class, if the faculty were to have the assistance of graduate students (in addition to the usual graduate teaching assistants).

Accordingly, the Office of Undergraduate Research and the Center for Teaching and Learning piloted the “Graduate Research Consultant” (GRC) program in fall 2003. Each Graduate Research Consultant was paid \$500 for thirty hours of work during the semester in which they helped students to frame questions appropriate for the discipline, design and carry out an original investigation, and report their findings to the class in oral or written (usually PowerPoint) form. Since its inception, twenty-four courses have been taught in the social science, humanities, and natural science areas involving thirty-three Graduate Research Consultants and nearly 1,000 students. This program has also received considerable national attention (*Integrating Research into Undergraduate Education: The Value Added*, 2004).

During the summer of 2004, the Office of Undergraduate Research and the Center for Teaching and Learning carried out a formal assessment of the program by interviewing all the faculty and Graduate Research Consultants involved to date and a random selection of students from each class. The response was overwhelmingly positive. Undergraduate students cited numerous benefits of the research component. These included the opportunity for hands-on learning, exposure to valuable library and Web resources, increased knowledge in statistical methods, and greater confidence in conducting primary research.

“...I feel like I have a lot more power over the research. It’s not like I have to go seek all this information out and maybe I’ll find it, maybe I won’t. I feel a lot more confident that I know how to do it and that it’s not a big scary thing. I feel much more in control of doing it.”

--Undergraduate student

“I definitely think this [research project] is valuable because I haven’t had any other classes where we’ve had to use SPSS or any of those programs so I’ve done research projects but never with statistical analysis. And so it was very beneficial in that I learned how to use data sets and things like that for research. At first I didn’t want to do it going into it, but after I came out of it I was like wow, I understand things a lot.”

--Undergraduate student

“...it was very valuable because you learned way more on your own than you would ever in a classroom.”

--Undergraduate student

The fourteen graduate students who were interviewed enjoyed the experience, intend to participate again if possible, and have recommended the program to others. They also say that they intend to incorporate student research into their own courses in the future.

“My experience as a Graduate Research Consultant was exciting—to have a role in allowing students to develop their own field work...for me it was exciting to see how that might work and to see what kind of support you might need for that to be successful...it was rewarding for me. It was also challenging. It helped me to know, if I were to implement [a research component] in my own course in the future how I might go about structuring it.”

--Graduate Research Consultant

“It was a great experience to work with undergrad students. It was fantastic to be able to see how the professor set up his class to include these group research projects. More than anything else, I saw a way of how to get undergrads involved in and excited about research.”

--Graduate Research Consultant

“...As another teaching method, having students work in small groups on projects has impressed me as a way to help students learn and gain mastery of some material that they wouldn’t in a lecture format. It sort of astounds me how little people absorb from that format. And my role of GRC has helped highlight that for me.”

--Graduate Research Consultant

Faculty members were also enthusiastic about the program. Many elected to incorporate a multidisciplinary component into their courses to utilize the expertise of Graduate Research Consultants outside their own discipline. The faculty also appreciated the assistance they received with the logistics needed to support student research projects, and enjoyed supporting graduate students’ professional development as instructors and as future faculty members.

“...It makes for a better course. Because I’m convinced that the students like to do a research project...you want students to really be engaging with the world. And they can do so with

research as a complement to what they're learning in class. And there's really not a substitute for that."

--Faculty member

"I wouldn't have done the project without a Graduate Research Consultant and in particular it worked very well to have his expertise in survey research because I'm not an expert on survey methods. So he was able to describe various scales and talk about different kinds of questions in a way that I couldn't have done. So I appreciated that."

--Faculty member

"...I was really drawing on her [the Graduate Research Consultant's] expertise with having worked in this kind of project. Because I'm trained as a historian, I'm aware of a lot of methodologies, but I haven't actually participated in—especially things that kind of bordered on empirical. She knows the literature a lot more in that regard. So it was invaluable to me to have somebody like that."

--Faculty member

Based on these findings, we believe that the Graduate Research Consultant program represents a flexible model that can be adapted in a variety of disciplines. We also believe that it successfully introduces students to the habits of mind that are essential for creative contributions to the discipline. The ways we propose to expand and assess the Graduate Research Consultant program as part of the **Making Critical Connections** are described below.

Undergraduate Research Symposia

In addition to the focus on the intersection of graduate and undergraduate education, the Office of Undergraduate Research concentrated on bringing the results of student creative work to a broader audience. Each year the Office of Undergraduate Research sponsors a "Celebration of Undergraduate Research," which typically draws seventy-five to one hundred students, their parents, graduate and faculty mentors, and friends. The symposium includes performances, oral presentations ("platform sessions"), and poster sessions.

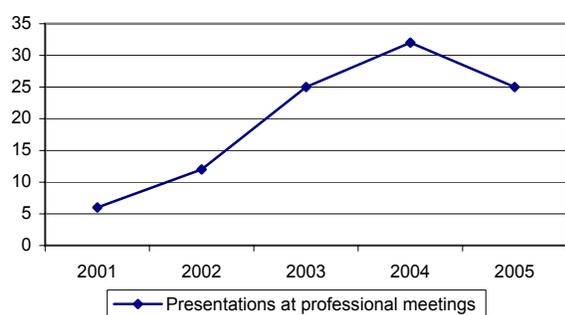
The Office of Undergraduate Research Director also initiated undergraduate research symposia for the North Carolina General Assembly in April 2001 (Pukkila and Whatley, 2001). The first "Research in the Capital" symposium involved four schools in the University of North Carolina system (UNC-Chapel Hill, North Carolina Central University, North Carolina State University, and UNC-Asheville). The UNC System Office of the President formed an Undergraduate Research Consortium in the summer of 2001, and the Consortium planned an expanded Research in the Capital symposium for April 2003 and April 2005. The goal of the symposia has been to highlight the important role of research in undergraduate education and the ensuing benefits to the state.

Each campus selects students to participate in the symposium from a pool of candidates nominated by their faculty advisors. Criteria for selection include the originality and importance of the work and the students' abilities to communicate the significance of their results to non-specialists. Another goal of the symposium was to showcase a broad range of disciplines

before the legislature. Prior to the start of the symposium, in-state students visit legislators representing their home districts and invite them and their staffs to attend. Both in-state and out-of-state students who have conducted research with particular relevance to social, economic, and/or cultural issues in different parts of North Carolina are asked to invite appropriate legislators to their presentations. In 2005, students from eight campuses were introduced in the House and Senate Chambers in the evening session prior to the symposium. The legislators have responded with amazement at the high quality and importance of the work presented. The UNC Board of Governors endorsed a request to support undergraduate research throughout the UNC system in the 2005-2007 Biennial Budget.

Undergraduate Presentations at Professional Meetings

The Office of Undergraduate Research has also encouraged students to travel to professional



venues to present their work. Students can apply for grants of up to \$1,000 to help defray the associated expenses. In addition to providing a valuable experience for the students, these presentations allow others to appreciate the high quality of our students' creative contributions. These awards have been provided for students across all disciplines, including the performing arts.

Balanced Participation across Disciplines and the Inclusion of Under-Represented Minority Students

The Office of Undergraduate Research has encouraged undergraduate participation in research in all disciplines, and has designed a series of programs ranging from exposure to research methodologies in particular classes to summer fellowship support. To encourage participation across the disciplines, the Office of Undergraduate Research has sought a balanced representation on its faculty and student advisory boards and in the selection committees for fellowships and the "Research in the Capital" symposium. The Office of Undergraduate Research has also been sensitive to the needs of under-represented groups both in our programs and in the composition of our various advisory groups.

In addition, the Office of Undergraduate Research has benefited from the experience of established campus programs such as the Summer Pre-Graduate Research Experience (SPGRE) and the Moore Undergraduate Research Apprentice Program (MURAP). Both of these programs have provided guidance on how to recruit and engage diverse students in the sciences and social sciences, respectively. Although these programs are primarily focused on research experiences for non-Carolina students, they have provided important models for helping faculty to "see the talent" among under-represented minority Carolina undergraduates, especially for programs that rely on faculty nominations.

The Office of Undergraduate Research collaborates closely with the Office of Student Academic Counseling in the implementation of two programs to increase participation in science and math by under-represented minority students. The first, the "Science and Math Achievement and

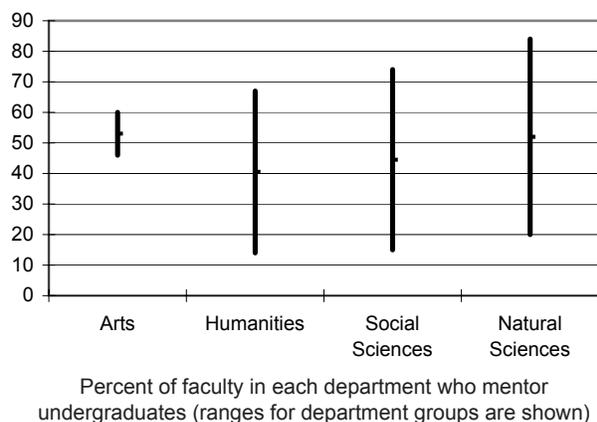
Resourcefulness Track” (SMART) is funded by the National Science Foundation as part of the Louis Stokes Alliance for Minority Participation. This program, which was established over a decade ago, supports research projects of students between their freshman and sophomore years. More recently, Duke Energy sponsored the “Duke Energy Bioscience Scholars” program to help recruit high-achieving students to UNC-Chapel by bringing these bioscience students to campus prior to their first year for a research experience (together with a SMART “alum”) and a class during a summer session. This program was piloted in the summer of 2005.

CURRENT UNDERGRADUATE ENGAGEMENT IN RESEARCH

Many universities have had difficulty measuring the types of research experiences engaged in by their undergraduates; UNC-Chapel Hill has been no exception. Since 1999, the Office of Undergraduate Research has used two primary sources of information to estimate the extent of undergraduate involvement. First, questions about opportunities to engage in research and creative expression -- and overall satisfaction with those experiences -- were identified on the National Survey of Student Engagement and added to surveys administered to students by UNC-Chapel Hill’s Office of Institutional Research and Assessment. Second, courses that award credit for student research experiences were identified in each department, and the number of students receiving course credit for research was monitored. The proportion of students carrying out research projects has increased from 25% to 31% over the past five years, and the number of course credit hours awarded for research is about 3,000 per year. These data are useful to establish trends, but they are limited in several ways. First, it is not always clear what students mean by a “research experience,” so the number may be an overestimate. Second, there has not been a uniform numbering system at the University, especially regarding “independent study” courses. Since these do not always represent research experiences, they were excluded from the analysis; hence, the credit hour count is probably an underestimate. Since both undergraduate research courses and undergraduate thesis courses will receive designated numbers in the new curriculum, it should be easier to track enrollments during the implementation of **Making Critical Connections**. This year, to obtain more accurate data and to quantify the products of undergraduate research and scholarship, the College of Arts and Sciences added several questions to the online “Annual Report” that faculty complete each year.

The College’s modified Annual Report asks several questions under the “teaching tab” that allow faculty to record the number of research projects they supervised, and also the number of theses they directed each year. In addition, faculty members are asked to identify any undergraduates who presented their work at professional meetings, and to identify co-authors of publications who were undergraduates at the time the work was done. These data allow the simultaneous determination of the extent of faculty involvement in each department, the number of undergraduates engaged in creative work across the disciplines, and the products of undergraduate scholarship.

The full Summary Table for 2004-2005 is included in Appendix D. Several trends are highlighted here. First, 51% of the faculty completing the Annual Report mentored one or more undergraduates in research during 2004-2005. Faculty in all departments served as mentors.



The ranges seen in departments in each discipline are shown here. For example, in humanities departments, between 14% and 67% of the faculty in each department served as mentors (units with only a single member were excluded from this chart). Also, the Summary Table demonstrates that there is an excellent balance among the disciplines, with 125 projects in the arts, 262 in the humanities, 430 in the social sciences, and 470 in the natural sciences. It appears that faculty across the College of Arts and Sciences are already very engaged in mentoring undergraduate

research projects. While the number of faculty mentors in some departments may increase as a consequence of **Making Critical Connections**, this is unlikely to result in a dramatic expansion of undergraduate research opportunities. Since these 375 faculty members supervised 1,287 projects last year, it is also unlikely that these faculty members will be willing to mentor substantial numbers of additional students. These apparent constraints on the number of faculty mentors are discussed below.

RECOMMENDED INITIATIVES

I. **Appoint four current UNC-Chapel Hill faculty members to terms as “Undergraduate Research Professors” to support and expand undergraduate research opportunities in all disciplines.**

To build, support, and expand undergraduate research opportunities, the University intends to appoint four current faculty members to serve terms as “Undergraduate Research Professors.” The faculty members in these positions will reflect each of the four divisions in the College of Arts and Sciences (Fine Arts, Humanities, Natural Sciences and Mathematics, and Social and Behavioral Sciences). It may also be appropriate to appoint faculty members to these (or additional positions) from the Professional Schools where undergraduate participation in research activity is thriving or could be strengthened. These faculty members will lead by example and also help their colleagues to develop courses based on student creative work, inquiry, and research, thereby creating successful models for undergraduate research throughout the University.

These term professorships, which would last for three years and not be renewable, would: (1) be appointed on a competitive basis; (2) carry a stipend and compensation for the department when teaching load is affected; and (3) help incorporate undergraduate research in their own disciplines to increase the number of research-intensive courses and develop new Research Tracks (described below). During their terms, these “Undergraduate Research Professors” would work with the Director of the Office of Undergraduate Research to facilitate the transfer of successful methodologies developed in one department to others. It seems clear that a small number of innovative faculty members could inspire productive changes across the campus.

II. Establish Multidisciplinary “Research Tracks.”

Although undergraduate involvement in research is already substantial at UNC-Chapel Hill, the many ways that undergraduate students can become involved are not always obvious. Some students enter the University with research experience and with clear ideas about what they want to accomplish as undergraduates. Others arrive with the expectation that they will focus on learning “the basics” and will undertake projects of their own design after earning their degrees. By creating links between courses that introduce students to solvable problems, explore modes of inquiry and investigation, and enable students to undertake projects, the “Research Tracks” promise to help guide students in choosing an appropriate series of courses at the University. These links will enable students to connect the knowledge that they gain through their coursework with their personal goals, and in the process carry out original investigations.

The basis for these Research Tracks already exists in several disciplines, which could serve as models for new tracks. The University recommends that each track include an introductory course that explores the boundary between the known and the unknown in one or more disciplines. (It should be noted that many First-Year Seminar courses already have this focus). The University believes that each track should also include a course that exposes students to multiple modes of inquiry. Finally, each track should include course credit for original student work (such as an Honors thesis, a research course receiving credit under the experiential education requirement, or a course in which groups of students work together to produce a product of value to the discipline).

Identify existing courses that can serve as model Research Tracks.

The University recommends that existing courses that comprise Research Tracks in various disciplines be identified by each department and highlighted as a part of the implementation of the new General Education curriculum. If a “Connections Center” is established (as recommended in the Curricular Innovation section), it would be a useful place to collect and disseminate information about the Research Tracks. The proposed searchable database of “Indexed Course Listings” of descriptive terms for each course would be an ideal mechanism for allowing students to view various Research Tracks. These listings would also allow both students and faculty to appreciate opportunities for interdisciplinary study and research.

Invite faculty to design new Research Tracks and/or modify their courses to contribute to one or more Research Tracks both within and across disciplines.

Several successful models for Research Tracks already exist in the University. For example, the Department of Psychology has a well-defined series of courses to introduce students to appropriate methodologies. The Department of History requires all students majoring in history to choose a topic of interest and enroll in a seminar course in which they gain experience with original source materials. The University recommends that graduate students be invited to participate in the design of new Research Tracks, particularly in departments such as English where advanced graduate students often serve as the instructors of record.

The University also looks forward to the development of courses that would introduce students to multiple methodologies appropriate for the investigation of particular topics. The development of interdisciplinary Research Tracks can be viewed as an example of the “Integrative Option: Interdisciplinary Cluster Program” proposed for the new General Education curriculum. (The Integrated Clusters are discussed at length elsewhere in this document.)

Investigate ways in which the proposed “Maymesters” and/or “Submesters” can facilitate the implementation of Research Tracks.

The proposed “Maymester” and “Submester” scheduling options could prove ideal for any component of a Research Track, and would be very attractive to faculty members wishing to help students engage in focused research for a limited period of time. The committee recommends that the course development awards proposed for the Maymester and/or Submester include a specific call for courses that could contribute to one or more Research Tracks.

A major advantage of the proposed Research Tracks is that they would offer clear guidelines to undergraduates on how to get started in research and how to obtain the best preparation for undertaking research projects of significance. They should help ensure that students undertaking thesis projects would have the necessary background and experience to commit to the work and carry it through to completion, thus increasing the satisfaction of both the students and the faculty mentors. They would also indicate the University’s commitment to undergraduate research experiences.

III. Increase the number of course offerings in which students carry out original research projects using Graduate Research Consultants.

It is unlikely that every UNC-Chapel Hill undergraduate will undertake an individual research project. However, it is possible that every student at the University could: have some experience with asking an original question; using methods appropriate to specific disciplines to frame such a question in a way that it could be investigated; apply appropriate methods to investigate the question; and communicate the findings to peers. The committee recommends that the Graduate Research Consultant model be utilized to increase the number of such courses on our campus.

The origins of the Graduate Research Consultant (GRC) program are described above. To date, the program has steadily increased in size through the recommendations of faculty to their colleagues. In addition, faculty have exchanged information about their experiences in an annual lunch meeting involving experienced faculty and those new to the program. To expand the program appropriately, department level planning and additional resources are necessary.

The advantage of including Graduate Research Consultants in courses is that these graduate students can provide the “coaching” needed for the undergraduates as they begin to undertake original work. Undergraduates could be exposed to such “research modules” in a variety of disciplines, thus helping them to refine their interests. Undergraduates who choose not to engage in more sustained projects would still have one or more research experiences, which often result in a greater enthusiasm and deeper understanding of the course materials.

IV. Enhance the opportunities for undergraduate students to be mentored in original research.

As described above, faculty members in the College of Arts and Sciences have already willingly embraced their responsibilities as mentors to undergraduates. We expect that the overall effect of **Making Critical Connections** will be to increase undergraduate exposure to research. Students who are introduced to an exciting question in a First-Year Seminar and choose a “Research Track” to investigate related questions are likely to want the opportunity to conduct original research. The University must plan to meet the expected increase in demand for research experiences by undergraduates.

Accordingly, the University has identified three objectives. First, graduate students and postdoctoral fellows should prepare to become qualified mentors of undergraduates (with appropriate faculty oversight and supervision). Second, the Summer Undergraduate Research Fellowships (SURF) program should be expanded. Finally, departmental level planning to reduce barriers to undergraduate participation and to acknowledge faculty mentoring of undergraduates is needed. Barriers currently exist that prevent undergraduates from carrying out research projects with faculty in the professional schools, particularly those with limited or no undergraduate programs. Such barriers should be reduced or eliminated so that faculty in these areas can enjoy the benefits of working with talented and qualified undergraduates, and so that undergraduates can receive appropriate course credit for their efforts. (The Department of Biology provides a successful model: nearly half of the research for honors theses is carried out in laboratories in the School of Medicine.) In addition, faculty members (particularly in “mentorship-intensive” disciplines in the humanities) should receive formal support for their work with undergraduates in a form such as reduced administrative responsibilities or “credits” toward a course-release or research leave. Such support should be consistent with the mission and resources of each department.

Offer mentoring awards to both graduate students and postdoctoral fellows.

Experience has shown that graduate students and postdoctoral fellows can be superb mentors for undergraduate students. Often graduate students and postdoctoral fellows can help undergraduates make connections with faculty whom they might not otherwise have known. These undergraduates benefit from working with someone who is closer to their level and who has the time and patience to work with them individually. They can also receive current information about graduate and professional school and other career choices. The University has also seen that graduate students benefit from the mentoring relationship. By learning to supervise, they report that they understand their own faculty mentors better. The mentoring experiences also help them to reflect on their teaching skills and deficiencies and help them become better professionals. While some graduates are natural mentors, others require some assistance in recognizing issues that require conscious choices and planning (e.g., how to connect the project with what the student already knows and how to instill an intellectual interest in the work). The Office of Undergraduate Research has found that workshops are an effective means for graduate students to share their experiences and develop strategies to address these and other issues (Pukkila and Milgram, 2001).

Since many postdoctoral fellows also serve as mentors for undergraduate projects, the pool of capable and effective mentors could be expanded productively if the University were to

create a parallel postdoctoral mentoring program. Postdoctoral participants would be asked to design a productive research experience, discuss it in a workshop format, and reflect on their experiences at the conclusion of the project period. As with the graduate research mentors the postdoctoral mentors would receive compensation for their work with undergraduates.

The University plans to develop mechanisms to acknowledge the work of the graduate and postdoctoral mentors. Such formal recognition of their mentorships could be of benefit to those about to enter a competitive job market, especially since many schools now ask applicants to document their abilities to supervise and mentor others.

Expand the Summer Undergraduate Research Fellowship program.

The summer months are an ideal time for undergraduates to engage in a sustained research experience. However, most students require financial support for such an undertaking. The Summer Undergraduate Research Fellowship (SURF) program has been supported by a combination of grants from foundations, government agencies and individual donors. However, fewer than 30% of the deserving applications can be funded with current resources. Although students learn by working with faculty to prepare their applications, it is clear that those who are awarded the fellowships derive far more intellectual and practical benefits from the experience. Since the University's mission is to make research a distinctive feature of the undergraduate experience, support for an expanded Summer Undergraduate Research Fellowship program is essential.

Undertake department level planning to (1) remove existing barriers in those professional schools without undergraduate programs to allow formal mentoring of undergraduates, and (2) to develop formal mechanisms to acknowledge faculty members who mentor undergraduates at the University.

To understand the extent of undergraduate research with Health Affairs mentors, the University carried out a survey of Health Affairs faculty in basic science departments. We received responses from 118 out of 843 faculty members surveyed. Of these, 70% had mentored undergraduates within the past three years (and 67% reported co-authoring papers with undergraduates). The vast majority of experienced mentors intend to continue working with undergraduates, and half of the respondents who had not yet worked with undergraduates reported that they intend to do so in the future. These results suggest that undergraduates are finding research opportunities that interest them with Health Affairs faculty, and that the number of these opportunities could be expanded.

The Health Affairs faculty also identified two barriers to mentoring additional undergraduates that **Making Critical Connections** seeks to address. First, many Health Affairs departments lack simple mechanisms to grant course credit for undergraduates carrying out research projects. When students work as "volunteers," problems can quickly arise when each party's expectations are not clearly understood. If instead such students could enroll in a course that would satisfy the experiential education requirement of the new General Education curriculum, guidelines for satisfactory performance could be explained in advance, and students would know that their work would be acknowledged appropriately on their academic transcripts. *Granting such credit would remove a considerable administrative burden from the larger science*

departments in Academic Affairs. Faculty members in these departments currently oversee undergraduate work in other departments if the students doing the research will receive credit in the major or toward an honors thesis. While appropriate for extensive research projects, such “sponsors” are not necessary if this alternative mechanism for granting experiential education credit can be adopted.

Some Health Affairs faculty members discussed a second set of concerns. These included undergraduates’ lack of training in the sophisticated techniques used in their laboratories, the relative lack of laboratory experience among undergraduates, and the faculty members’ desire that they work with undergraduates over several semesters. In light of these concerns, the University recommends the addition of such “laboratory preparation” courses in the basic science “Research Tracks.”

An administrative barrier also exists that hinders undergraduate research in these professional school departments. In general, there is often a lack of awareness of many Office of Undergraduate Research programs, and a lack of understanding of College of Arts and Sciences’ procedures for course design and approval. The University recommends that interested departments appoint an “Undergraduate Research Liaison” with the goal of increasing communication between the department faculty and the Office of Undergraduate Research. In turn, the Office of Undergraduate Research would ensure that these liaisons would receive timely advice and help with a wide range of administrative procedures.

Planning at the department level is also essential to document commitment to mentoring undergraduates and to acknowledge faculty involvement with undergraduate research. Although a number of UNC-Chapel Hill faculty members across the campus currently serve as mentors for undergraduate research projects, these responsibilities are not shared equally. On other campuses, faculty supervision of undergraduate research is acknowledged formally. For example, at the University of North Carolina at Asheville, faculty members who supervise three undergraduate research students during a semester are credited with 0.25 contact hours for these mentorships. Faculty members at UNC-Chapel Hill (particularly in “mentorship-intensive” disciplines in the humanities) should receive formal support for their work with undergraduates in a form such as reduced administrative responsibilities, or “credits” toward a course-release or research leave (commensurate with the mission and resources of each department). The appointment of the “Undergraduate Research Professors” would provide a model for such acknowledgement as described above. It is the University’s expectation that departments will establish goals for experiential education and undergraduate research, and that departments will establish mechanisms to enable faculty to undertake additional responsibilities in these areas by reducing faculty responsibilities in other areas.

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Internationalization

Overview

When asked to define the term “internationalization,” some of the most experienced “internationalists” at the University of North Carolina at Chapel Hill spent a good deal of time crafting a definition at once consistent with the most advanced thinking on the subject and at the same time consonant with the University’s institutional traditions and needs. To our way of thinking, internationalization can be defined as follows:

Internationalization is the process of integrating an intercultural and global dimension into the purpose and function of education at UNC-Chapel Hill in a manner consistent with both our core values as a public institution and the furtherance of a sense of global citizenship among our intramural and extramural constituents.

Note that in this report we prefer to use the terms “internationalizing” and “internationalization,” rather than “globalizing” and “globalization.” We do so not because there is any particular problem with the rather more holistic concepts “globalizing” and “globalization,” but because we want to stress the *relational, connective* elements in our Quality Enhancement Plan, which elements are captured nicely by the Latin root *inter*, meaning between or among. We want to stress not only the relationships among the three parts of our plan, of course, but the relationship between and among UNC-Chapel Hill and various parts of the world.

But what exactly does internationalization mean? In attempting to define the term, one is tempted to invoke the great jazz trumpeter Louis Armstrong, who, when asked how to define jazz, famously responded: “If you gotta ask, you’ll never know.” If pressed, however, one might start by noting that the process of making connections between places on a global scale is multi-layered and multi-faceted. Moreover, integrating an intercultural and global dimension into the purpose and character of education at UNC-Chapel Hill means striving toward certain metrics and benchmarks, as well as striving to achieve more subtle changes in the University’s symbols, look, and feel -- its “international countenance.”

What about our core values? For what does the University of North Carolina at Chapel Hill stand? Here, too, the answer is complex, but we stress three key themes: (1) top-flight humanistic, social scientific, and scientific research; (2) an impressive record of dissemination of such research through the education of a variety of intramural and extramural constituencies; and (3) a commitment to progressive social change -- that is to say, to the promotion of greater justice, equity, and democracy through our research, teaching, and service.

In regard to the promotion of social change, UNC-Chapel Hill has traditionally defined its geographical purview to be the state of North Carolina, the South as a region, and -- to a lesser extent -- the nation as a whole. In the future, our reach must extend to the entire world. Neither our problems nor our opportunities can be defined any longer by the distance “from Murphy to Manteo” (as the local saying goes). Nor for that matter can they be limited by our national boundaries. To understand the impact of globalization on North Carolina, one need only ask some of our fellow Tar Heels: a laid-off Pillowtex Corporation worker from Kannapolis, an

unemployed furniture hand from Hickory, a Mexican migrant farm laborer in Duplin County, or a Chinese scientist in Research Triangle Park. Or ask some of our Chapel Hill alums: an investment banker in London, a Peace Corps volunteer in Bolivia, an HIV nurse in Malawi, or a visiting faculty member at the National University of Singapore.

What about global citizenship, and who are our core constituencies in this arena? Like internationalization, “global citizenship” *qua* concept is hard to pin down. Moreover, we must be careful not to reduce the concept to sentimental cliché. Basically, what we at UNC-Chapel Hill mean by the term is awareness of and engagement with: (1) transnational or supra-national issues; (2) sensitivity to what might be called “international positionality;” (3) empathies transcending national boundaries; and (4) a commitment to seek out multilateral modes of resolving transnational and supra-national problems when and where appropriate. Moreover, in light of our core values and historical role in the state and the region, many in the University community would go even further and incorporate universal conceptions of human rights, duties, and responsibilities. Given the diversity of our intramural and extramural constituents -- faculty, staff, students, alumni, corporate bodies of one sort or another, North Carolinians, Southerners, and other Americans -- and the stark differences at present in these constituents’ positionality, the University’s promotion of a robust conception of global citizenship is no small task. But then again, neither was helping to modernize the South during the 1930s, 1940s, and 1950s.

Objectives

Our operating assumption in formulating this component of the QEP is that there is a *fundamental* relationship between the improvement of our international infrastructure and our ability to integrate “an intercultural and global dimension into the purpose and function of education at UNC-Chapel Hill;” that is to say, to internationalize. By improving our international infrastructure we will be in a better position to facilitate international research, to embed internationalization into the curriculum, and to support and sustain international personnel at UNC-Chapel Hill. All these desired elements are integral to bringing about the key student learning outcomes in which we are interested. They would enhance students’ international and intercultural competencies through greater institutional commitments to international travel and research, advanced language training, internationally-oriented coursework, and the circulation of international personnel (and ideas). A more cosmopolitan learning atmosphere and environment at UNC-Chapel Hill would be created.

Our objectives are to:

I. Improve our international infrastructure.

- Enhance the Web presence, communications capabilities, fundraising operations, visa-handling efficiency, English as a Second Language (ESL) facilities, and international housing options. Additional communications staff members would devise strategies (including perhaps a new journal devoted to internationalization) to make UNC-Chapel Hill’s international accomplishments more visible.

II. Enhance financial support for international research.

- Support pan-University research initiatives, in particular the existing Title VI centers (National Resource Centers funded by the United States Department of Education), and

the three newly-created centers (the Carolina Asia Center, the Carolina Center for the Study of the Middle East and Muslim Civilizations, and the African Studies Center).

III. Embed internationalization more deeply into the curriculum.

- Increase the participation of UNC-Chapel Hill undergraduates in study abroad programs.
- Expand the number and proportion of Carolina undergraduates who pursue international research projects.
- Increase the number and proportion of internationally-oriented courses in the curriculum and add international dimensions and inflections to courses not explicitly international in nature.
- Increase institutional support for collaboration with appropriate high-quality educational institutions around the world.

IV. Find ways to increase the number and proportion of international faculty, postdoctoral fellows, graduate students, and undergraduate students at UNC-Chapel Hill.

- Increase funding, initiate more aggressive marketing and advertising, and improve links with first-rate “feeder” institutions in high-priority regions.
- Devise strategies to better work within the constraints of the cap on out-of-state/ international undergraduates at UNC-Chapel Hill.

Internationalization

BACKGROUND

At this late date it is no revelation to point out that the process of globalization has profound implications for the modern research university. As a result of the shift toward increasingly integrated world markets for products, capital, talent, and ideas, the “world” of higher education, while not quite “borderless,” is certainly becoming smaller and its boundaries more permeable. Moreover the key problems, challenges, and opportunities of the twenty-first century are likely to be global rather than local, regional, or even national in scope -- or at the very least will have global dimensions, connections, and inflections.

A moment’s reflection makes this point clear. From the point of view of one of our primary funders and stakeholders -- the citizens of the state of North Carolina -- there are many pressing problems and challenges facing us today: international terrorism; manufacturing flight and the offshore outsourcing of jobs; the “Hispanicization” of North Carolina; global health concerns; environmental stresses; and ideological challenges from radical Islam and other sources.

Conversely, there are new international opportunities: a global market for talent and ideas; new sources of economic growth and dynamism (such as China, India, and Brazil); new fonts of demographic renewal (via immigration); and new sources of cultural enrichment (via international exchanges of one type or another).

The upshot of these problems, challenges, and opportunities was captured nicely in the title of a book published in 1997 by journalist William Greider: *One World, Ready or Not*. The best universities in the world are already ready for the world -- or are rapidly getting ready -- and

there is widespread recognition at UNC-Chapel Hill that we must do the same if we hope to retain a prominent position among the world's leading public research universities in the years ahead. Clearly, a decade or two from now (at the very latest) there won't be any such thing as a great national (much less regional or local) research university. A great research university will be international, or simply it won't be great. Indeed, the inclusion of internationalization in the University's tripartite Quality Enhancement Plan, **Making Critical Connections**, was predicated on that premise.

We believe that UNC-Chapel Hill can hold its own internationally in the years to come. We say this for several reasons:

- First, the fact that "extending Carolina's global presence, research, and teaching" was included as one of six key priorities in UNC-Chapel Hill's Academic Plan (adopted in 2003), which will guide the University's academic course for the foreseeable future.
- Secondly, international content -- language training, global/cross-cultural coursework, and experiential education (including most notably internships and study abroad options) -- has an enhanced place in the new General Education curriculum to be implemented in fall 2006.
- Thirdly, two new high-level administrative positions were created and charged with the responsibility both for developing a pan-University international strategy and for coordinating the University's diverse portfolio of international assets, programs, and initiatives.
- Fourthly, the University is currently building a large (82,000 square-foot) \$35 million structure -- the Global Education Center -- to serve as the hub of international teaching, research, and service activities at UNC-Chapel Hill.
- Finally, the University already has an impressive array of internationally-oriented human capital and an equally impressive stock of internationally-oriented research/teaching/service initiatives, programs, and policies upon which to build. The University's international posture was recognized in 2004 when it received the first Paul Simon Award for "best practices in internationalizing" from the Association of International Educators (NAFSA). To be recognized in this way by NAFSA -- the world's leading organization devoted to international education -- testifies amply to our accomplishments to date, and to our potential.

Still, there is much more to do. In a sense, the University is but "halfway home" when it comes to internationalizing. Indeed, in some ways UNC-Chapel Hill is fortunate to be as international as we are. Although the University has been a well-respected and relatively high-profile public research university since the 1930s, we got a late start in internationalizing (much later than many of our public and private peer institutions) and did so without much planning, let alone as the result of the implementation of a systematic strategy. To some extent we are still paying a price for such haphazard growth. It is not difficult to see why this would be the case.

For many years, University leaders strove to create a great regional university. In this, they succeeded brilliantly, and in so doing created a great national university. But until relatively recently, North Carolina's leaders saw no reason to go beyond this point. In an inward-looking Southern state little affected by immigration from the time of the Civil War until the early 1980s, international concerns, pressures, and currents bore less urgency than they did in the Northeast, the Midwest, and the Pacific Northwest.

Our "interiority" also had consequences when it came to internationalizing (in fact even nationalizing) the University. Since the 1980s, for example, the UNC system has required that

eighty-two percent of incoming first-year undergraduates must be from North Carolina, a policy that complicates our ability to diversify our undergraduate student body. As a result of these factors (among others), our international profile and visibility are nowhere near as great as is our regional and national profile and visibility. Our University's relatively low ranking (117th in 2004 and 143rd in 2005) in the first two iterations of the [London] *Times Higher Education Supplement's* "World University Rankings" is suggestive in this regard.

In creating the position of Associate Provost for International Affairs in 2003, the University moved to redress some of its institutional weaknesses in the international realm. Over the past eighteen months Peter Coclanis (the first holder of the position), along with his staff and others at the University, has worked to: (1) canvass, tally, and assess the University's international initiatives, links, and resources; (2) rationalize international programs whenever and wherever possible in order to reduce inefficiencies and redundancies; (3) combine and/or leverage programs and resources when and where possible in hopes of creating synergies that will enhance the delivery of international content and products; (4) render our international programs and overall posture more visible; and (5) begin to "brand" our international programs in such a way as to support, reinforce, and extend the University's core institutional values, particularly our historical commitment to progressive social change and to the promotion -- through our research, teaching, and service -- of greater justice, equity, and democracy.

While the University has traditionally sought to demonstrate such commitments in the state and the region, we now seek to extend our commitments to the national and international realms. No longer will we be content to consider the University's boundaries to be "coterminous with the boundaries of the state" --the extension of the University's mission made famous by UNC President Edward Kidder Graham in his inaugural address in 1914 -- or even with the boundaries of the United States. Today, our theater of operations must be the entire world.

CURRENT (INTERNATIONAL) CONNECTIONS

As suggested earlier in this report, UNC-Chapel Hill already has a formidable array of international assets upon which to build. For starters, with six International and Area Study Centers (some of which are shared with Duke University, North Carolina State University, and North Carolina Central University), a Language Resource Center (LRC), and a Center for International Business Education and Research (CIBER), the University has more U.S. Department of Education Title VI centers than all but two universities in the United States. (The six area centers within the College of Arts and Sciences are: the Institute for Latin American Studies; the Center for West European Studies; the Center for Slavic, Eurasian and East European Studies; the Center for Asian Studies; the Center for the Study of the Middle East and Muslim Civilizations; and the African Studies Center. The first three of these are so-called Title VI centers; the remaining three have applied for such status.)

A higher proportion (34.6 percent) of our undergraduate students participate in study abroad programs than at any other public research university in the country, according to the Open Doors 2004 report published by the Institute of International Education. We teach thirty-one foreign languages, have a vigorous undergraduate major in International and Area Studies, attract numerous talented international graduate students, professional students, and postdoctoral fellows to UNC-Chapel Hill (including Ford Foundation and Rockefeller

Foundation fellows), and support wonderful international outreach programs at all levels. We have embedded relationships with a range of excellent institutions around the world, and our international research portfolio is impressive and deep. In short, we have a strong and broad base upon which to build our international initiatives.

As stated earlier, one reason to establish the office of Associate Provost for International Affairs in 2003 was to create an opportunity for our very decentralized institution to conduct for the first time a truly comprehensive survey and assessment of the University's international programs, initiatives, links, and personnel. This task is largely complete, and as a result we now have a good sense of where we are in terms of internationalizing -- and where we need to be. We know where our international posture is strongest, and where we need to make significant improvements and upgrades. We also have a good sense now of the formidable impediments that will have to be overcome in order for us to realize our ambitions of becoming a great *international* research university. Although we have developed a multi-faceted strategy that we hope will move us forward, we must admit that some of our greatest obstacles are subjective in nature -- attitudinal and institutional/cultural -- and ones that do not readily lend themselves to precise measurement.

In the broadest sense, our internationalizing strategy is to seek out, encourage, and support important creative work of all sorts pertaining to the international/global realms. In so doing, we seek to implicate UNC-Chapel Hill in the most compelling global narratives of our times. As part of these efforts, we believe that we need better to educate our students, our political and business leaders, and the public in general -- indeed, all of our constituents -- about international issues and about the importance of "thinking internationally" (in contrast to "thinking continentally," Alexander Hamilton's prescient and quite appropriate injunction to the new nation's leaders in the late eighteenth century).

In order to achieve these aims, we believe that we will need (among other things) to embed international content and themes more deeply into the curriculum and to promote and facilitate the circulation of ideas (and personnel) globally to discover and, hopefully, in time to implement "best practices" wherever we find them. Our specific goals are to:

- A. Make UNC-Chapel Hill more attractive and accommodating to international talent of all kinds (students, faculty, visitors, etc.).
- B. Develop mechanisms for getting more of our students, faculty, and staff out into the world (whether through short-term visits, exchanges, conferences, internships and work experiences, research collaborations, or encouraging students to spend their "gap year" abroad).
- C. Leverage the University's existing international assets (e.g., the Kenan Institute Asia, a 75-person sustainable-development non-governmental organization headquartered in Bangkok, Thailand and Carolina for Kibera, a non-governmental organization affiliate that provides an array of social services in Africa's largest slum in Nairobi, Kenya).
- D. Establish alliances, linkages, and partnerships with the best and/or most appropriate partners worldwide (universities, think tanks, governmental and international agencies, NGOs) in the areas we deem of strategic value; and last but certainly not least, by raising sufficient monies -- via public support, private giving, philanthropic/corporate grants, and federal/international contract work -- to accomplish all of these goals.

Scores of individual projects and initiatives roost under each of these rubrics, whether organized under the auspices of one or another of the University's thirteen colleges and schools (the College of Arts and Sciences, the School of Education, the School of Government, the School of Information and Library Science, the School of Journalism and Mass Communication, the Kenan-Flagler Business School, the School of Law, the School of Social Work, the School of Dentistry, the School of Medicine, the School of Nursing, the School of Pharmacy, and the School of Public Health), or centrally on a pan-University basis.

Space does not permit a detailed listing of such projects and initiatives, but they range from the three large-scale University-wide research initiatives (focusing on global health, on globalization and the American South, and on China respectively) to the introduction of new foreign languages and new University courses on global themes (the new course being offered in 2005-06 on Global Health, for example) to the launching of new searchable, public-access databases on faculty international expertise and on international grants and linkages; from recently-developed study abroad programs in Cuba and Jordan to new memoranda of understanding to partner with the Chinese central government on ways of training health care and social work professionals in China; from support for *Carolina Passport*, a highly-acclaimed new undergraduate magazine devoted to internationalization, to the establishment of an innovative joint-undergraduate degree program with the National University of Singapore and a new, multi-level exchange program with King's College London.

The University can certainly point to example after example, but what does it all add up to? How do we assess whether we are in fact internationalizing as a university? What metrics do we use?

We can begin with the four benchmarks laid out as examples in the Academic Plan adopted by UNC-Chapel Hill in July 2003: (1) the number and rate of students enrolled in international and study abroad programs; (2) the number of programs or initiatives Carolina has with domestic and foreign partners or in international locations; (3) the number and proportion of faculty engaged in international research and creative activities; and (4) the amount of funding provided to international students and scholars. One can certainly think of other benchmarks or metrics as well, some of which might actually be more appropriate and useful. For example, there are world university tables, such as those compiled in for 2004 and 2005 by the [London] *Times Higher Education Supplement*. Because the evaluative criteria employed in this particular source emphasize international criteria (e.g.: international reputation, proportion of international students in student body, and proportion international faculty constitute of total faculty), we could chart our year-to-year performance in this ranking to help to assess how we are faring in internationalizing the University.

Similarly, we can measure the extent of our global presence via other means: the dollar amounts of international contracts and grants won; the number of international awards, scholarships, and honors accorded UNC-Chapel Hill faculty members and students each year; the amount of monetary support the University allocates to support international research and travel, and the amount of scholarship/financial aid dollars available to students for study abroad and internship programs; the number of internationally-oriented courses we offer; the number of international students, clubs and student groups, programs, and visitors that the University hosts annually, etc.

We also need *qualitative* feedback: the quality of our international partners; the prestige of the international grants, awards, and honors received; the rigor of the content in the internationally-oriented courses we offer; the nature of the activities pursued by our international clubs; the distinction of our international visitors, etc. Other, even less readily measurable criteria are also important to our task: the degree to which our students, faculty, and staff are truly “cosmopolitan” in nature; external and internal perceptions of the international character (or lack thereof) at Carolina; and the University’s international “clout.”

Enhancing internationalization at UNC-Chapel Hill will thus entail improvement judged in terms of both objective and subjective criteria, thus testing the commitment of the University to internationalizing. In academic year 2004-2005 the Associate Provost for International Affairs, working through the University Center for International Studies and with the support of the Office of Institutional Research and Assessment, conducted surveys with four discrete groups -- faculty, graduate and professional students, senior undergraduates, and first-year undergraduates -- in order to establish baseline data regarding internationalization at UNC-Chapel Hill. Those surveyed were asked to answer a variety of questions relating to their international interests, activities, competencies, and needs. They were also asked to assess the University’s abilities to support such interests, activities, competencies, and needs, and in addition were given an opportunity to write about particular problems and to make specific recommendations about how to enhance internationalization at UNC-Chapel Hill. In fall 2005 we added a fifth survey, this one of internationally-oriented alumni.

Preliminary analysis of all five surveys has now been conducted. The results of this analysis, broadly speaking, demonstrate that each of the constituencies surveyed: (a) recognizes the importance of promoting greater internationalization at UNC-Chapel Hill; (b) is positively disposed toward this goal; (c) and is cognizant of the constraints, particularly infrastructural and financial, that will have to be overcome or at least eased, before our aspirations regarding internationalization will be fully realized.

Although the five surveys generated a great deal of useful information, we were particularly struck by the frequency with which certain types of problems -- problems relating to what might be called “international infrastructure” -- were identified. We believe that one good index of the University’s commitment to internationalization will be its willingness to support further infrastructure and other vital “back office” operations, for such unsung facilities provide the structure necessary for embedding internationalization deeply into the University’s fabric and for enhancing student learning outcomes. What type of infrastructure and back office operations are we talking about? Our short list would include a prominent “international” Web presence; more aggressive communications and marketing of our international presence and accomplishments; an adequate number of dedicated development officers committed to raising money for international research, teaching, and service; sufficient funding support for the Office of International Student and Scholar Services, which handles visa issues and international documents; dedicated ESL facilities sufficient for handling the communications needs of international faculty, postdoctoral fellows, teaching assistants, students, staff, and their families; and a variety of reasonably priced, convenient housing options for short-term international visitors and for longer-term international researchers and students.

How can we best marshal available resources to enhance the internationalization process at the University, thereby making *even more* critical connections between UNC-Chapel Hill and the world? We are well aware of both the economic concept of opportunity costs -- the value of opportunities foregone because of a particular choice or particular choices -- and are cognizant of the difficulty of accurately estimating inputs (and assessing outputs of one kind or another) let alone outcomes. For the purposes of the QEP we therefore propose a small number of initiatives to enhance our international capabilities. These initiatives, if carried out, will over the course of the next five years take us much further down the road to becoming a truly international research university that provides rich opportunities for undergraduates as they strive to be global citizens.

RECOMMENDED INITIATIVES

- I. **Improve international infrastructure**, with a focus on our Web presence, communications capabilities, fundraising operations, visa-handling efficiency, ESL facilities, and international housing options. Among the possibilities are creating and maintaining an “international” button on the University’s homepage with links to all major international research, teaching, and services activities related to UNC-Chapel Hill; providing new funding for an additional development officer and an additional administrative assistant dedicated to raising money for international research, teaching, and service; adding communications staffing to devise strategies (perhaps a new journal devoted to internationalization) that would make UNC-Chapel Hill’s international accomplishments more visible. We will also need to provide additional funding to the Office of International Student and Scholar Services so that it can hire more experienced international education professionals; enlarge our ESL capacity and capabilities through the hiring of an ESL Trainer in the Writing Center, hire an additional teaching assistant devoted to international students in the Writing Center and ramp up our International Teaching Assistant support program as demand grows; create an ESL class or classes for family members of international faculty, students, staff, and postdoctoral fellows; and improve our ability to accommodate the housing needs of international faculty, students, postdoctoral students, staff, and visitors through the establishment and maintenance of an up-to-date inventory of available housing options.
- II. **Enhance financial support for international research**, particularly for the three pan-university research initiatives, the existing Title VI centers, and for the three newly-created centers (the Carolina Asia Center, the Carolina Center for the Study of the Middle East and Muslim Civilizations, and the African Studies Center) as they mobilize to achieve Title VI status.
- III. **Embed internationalization more deeply into the curriculum**. In order to produce more globally conscious citizens, UNC-Chapel Hill will seek the further globalization of the undergraduate curriculum through the following mechanisms: increasing the participation of our undergraduates in study abroad programs during their undergraduate years; increasing funding (program development funding and scholarships/financial aid) for such programs; enhancing the quality and appropriateness of such programs for our students; and making sure that coursework taken abroad meshes better with programmatic and degree requirements at the University; increasing the number and proportion of UNC-Chapel Hill undergraduates who pursue international research projects and who complete foreign language training through level 4; increasing the number and proportion of internationally-

oriented courses in the curriculum and adding international dimensions and inflections to courses not explicitly international in nature; and increasing institutional support for various forms of institutional collaboration (e.g., joint projects, programs, degrees) with appropriate high-quality institutions around the world. These efforts will not only help the international students who come to UNC-Chapel Hill, but they will enable Carolina's native students to connect their coursework to activities and encounters outside the classroom.

It is relevant to note that the University was recently selected for inclusion among a small number of select institutions in a prestigious two-year project "Shared Futures: General Education for Global Learning." "Shared Futures" is funded by the AAC&U (American Association of Colleges and Universities). We expect that as a result of our participation in this project we shall benefit from our colleagues' best practices in internationalizing General Education requirements. We also expect to share with them, in turn, our new General Education requirements which are already quite rigorous in terms of international content.

IV. Find ways to increase the number and proportion of international faculty, postdoctoral fellows, graduate and professional students, and undergraduate students at UNC-Chapel Hill. This effort will occur via increased funding, more aggressive marketing and advertising in appropriate international venues, developing links with first-rate "feeder" institutions in high-priority regions, and by devising novel strategies to optimize the number of out-of-state/international undergraduates at UNC-Chapel Hill, within the constraints of the current 18% cap.

References

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Assessment of the QEP

Assessing the extent to which students have learned to make critical connections will be particularly challenging. Measuring students' ability to analyze and evaluate different modes of thought and ways of learning and to synthesize prior knowledge with new information is more complex than measuring the accumulation of knowledge. In order to appropriately assess the learning outcomes of the initiatives recommended as part of **Making Critical Connections**, a variety of assessment techniques will be used, with the assessment process itself serving to raise awareness and promote reflection on the vital goals of integrated learning.

Due to its direct relationship to the new General Education Curriculum being implemented in the Fall 2006 semester, the evaluation of **Making Critical Connections** is both a subset and an extension of the assessment plan for the new curriculum (see "General Education Assessment Plan for 2006 and Beyond"). The focal point of these overlapping assessment plans is a longitudinal cohort study that will follow approximately 400 students over the course of their four years at UNC-Chapel Hill. The study will observe how the ability to make connections across different types of knowledge develops and is enhanced by participation in various kinds of learning experiences. In addition, other assessment measures have been designed to gather data to examine the effectiveness of specific initiatives within the three major areas of **Making Critical Connections**: Curricular Innovations, Undergraduate Research, and Internationalization.

Longitudinal Cohort Study

The Longitudinal Cohort Study has been designed to track students' academic performance, intellectual development, and attitudinal changes through their work products and personal descriptions of their educational experiences from their first day of classes until graduation. The choice of a longitudinal design was inspired by the University of Virginia's cohort studies of undergraduates in the 1990s and Richard Light's qualitative research on the undergraduate experience at Harvard University. The study is being overseen by a group of faculty members with expertise in the use of this methodology. The first group to be followed over their undergraduate years will be a random sample of four hundred incoming first-year students in fall 2006. These individuals will receive an invitation to participate in the longitudinal study in the summer prior to their enrollment and, if they consent, will participate in focused assessments several times each year. The assessment activities will require students to:

- **Submit selected work products from General Education curriculum courses to their own electronic portfolio located on a dedicated, secure server maintained by the Office of Institutional Research and Assessment.** Approximately one-third of the four hundred cohort participants will be recruited to create a portfolio containing samples of their work during their four years at UNC-Chapel Hill. Items to be maintained in the portfolio may include a statement of professional goals, an evaluated research paper or performance critique, a test or project demonstrating quantitative skills, a reflective essay on connections between extracurricular activities and/or various courses taken at UNC-Chapel Hill, or an internship evaluation or review. Samples of electronic portfolios will be assessed by

independent faculty judges with expertise in appropriate content areas who will measure performance against specially designed rubrics. Review of individual students' portfolios over time will allow an in-depth assessment of progress toward achieving the learning objectives of the new curriculum, particularly connecting and integrating various fields of knowledge and ways of learning.

- **Complete periodic surveys about academic performance, learning experiences, course-taking patterns, perceptions of courses, and the interplay of academics and research with other co-curricular activities.** Surveys will include the Cooperative Institutional Research Program's Freshman Survey, the National Survey of Student Engagement (NSSE), the UNC System Sophomore and Senior Surveys, and locally-developed instruments. The cohort group's responses on these surveys will be compared with those of students who matriculated at Carolina under the old General Education curriculum, and who thus did not have the opportunity to participate in the special enrichment initiatives being proposed for "**Making Critical Connections.**"
- **Participate in focus groups and individual interviews to discuss course selection decisions, experiences in the courses, perceptions about skills and knowledge acquired during classroom-based and experiential learning courses, and the extent to which they are making connections between various types of knowledge.** For example, one might ask how courses taken outside the students' majors contributed to their overall educational goals and what activities or events have contributed to their learning experiences at UNC-Chapel Hill. Students might be asked what they view as the goals of a college education, how that view compares to their experiences here, or how their goals changed. They could also be asked to address a complex problem that necessitates integrative problem-solving skills drawing on knowledge from several disciplines. An individual student's responses to the same problem could be tracked over time to study whether abilities to make critical connections are indeed being stimulated by the new curriculum.

From such a study, we expect to obtain a rich pool of data. This collection of quantitative and qualitative information promises to be of great benefit in helping us assess the learning outcomes of a more connected educational experience, identifying areas in which improvements can be made, and gathering ideas for further honing our efforts.

Specific Assessment Plans for Components of Making Critical Connections

In addition to the information being collected as part of the Longitudinal Cohort Study, assessment plans have been designed to evaluate special initiatives within each of the three major components of **Making Critical Connections**. The program objectives, participation goals, and student learning outcomes for each component are outlined in the tables that follow. These tables provide information on the assessment methods to be used, implementation and data collection tasks and roles, and performance criteria for determining the extent to which goals and outcomes of the initiatives are being achieved. A variety of methods are planned to collect data that can be used for formative evaluation and improvement throughout the course of the project, as well as to prepare a more summative evaluation of the overall effectiveness of **Making Critical Connections** at the end of the five-year implementation period.

The records of students who participate in undergraduate research projects, study abroad programs, the Maymester, and other special initiatives of the **Making Critical Connections** plan will be flagged so that comparisons can be made between their survey results and academic outcomes and those of other students who did not take advantage of those opportunities. Within the Longitudinal Cohort group, it will also be possible to compare the portfolio materials and interview transcripts of students who did and did not participate in these special programs.

Organization and Support of Assessment Activities

Overall responsibility for the assessment component of **Making Critical Connections** will belong to the Implementation Committee for the 2006 Quality Enhancement Plan and its chair. As indicated in the "Implementation and Data Collection" section of the assessment plans, staff in the Office of Institutional Research and Assessment, the Center for Teaching and Learning, the Office of Undergraduate Education, the Office of Undergraduate Research, and the University Center for International Studies will participate in various parts of the data collection, analysis, and reporting activities. Coordination of these varied assessment activities and preparation of reports on assessment findings will be the responsibility of the Assistant Provost for Institutional Research and Assessment (currently Dr. Lynn Williford). Funding for an additional staff person to provide technical support for the assessment activities described in the plans will also be provided. A faculty-led Connections Assessment Committee -- made up of faculty with combined expertise in longitudinal research, educational assessment, and curriculum evaluation -- will be appointed to serve in an oversight and advisory capacity for the project.

References

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Assessment Plan for the Curricular Innovations Component of Making Critical Connections

Goal of the Curricular Innovations Component: To enhance students' ability to make connections between various forms of knowledge and experiences through a series of curricular innovations related to the implementation of the new General Education requirements being implemented in the 2006 Fall semester.			
Program Objectives, Participation Goals, and Student Learning Outcomes	Assessment Methods	Implementation and Data Collection	Performance Criteria
Program Objectives			
<ul style="list-style-type: none"> • Provide students with an intensive integrative learning experience through the Maymester. • Study the feasibility of developing other innovative scheduling options such as Submesters and Integrated Clusters. 	<ul style="list-style-type: none"> • Track the number of Maymester course proposals submitted. • Analyze contents of Maymester experiences proposed and offered. • Analyze results of course evaluations and focus groups with participating faculty and students concerning extent to which Maymester experiences met the objective of providing the opportunity for intensive reflection and exploration of a single theme. • Synthesize findings from the evaluation of the Maymester pilot and conduct additional needs assessment for Submesters and Integrated Clusters options. 	<ul style="list-style-type: none"> • The Office of Institutional Research & Assessment will summarize course offerings and analyze contents of course descriptions using data from the University Registrar and the Office of Undergraduate Education. • Design, facilitation, and analysis of focus groups and course evaluations will be jointly conducted by the Office of Institutional Research & Assessment and the Center for Teaching & Learning. • The Office of Undergraduate Education will review the results of the Maymester evaluation and the needs assessment for the Submester and Integrated Cluster options. 	<ul style="list-style-type: none"> • Course proposals and experiences offered through the Maymester will reflect a wide range of learning experiences that contain opportunities for reflection and integration. • Faculty and student feedback will indicate that Maymester experiences were consistent with the stated objectives of the course.
<ul style="list-style-type: none"> • Develop and implement interdisciplinary three-course clusters. 	<ul style="list-style-type: none"> • Track the number of course cluster proposals submitted. • Analyze the contents of course clusters proposed and offered. • Analyze the results of course evaluations and focus groups with participating faculty and students concerning the extent to which course cluster experiences met the objectives for exposing students to varied disciplinary perspectives. 	<ul style="list-style-type: none"> • The Office of Institutional Research & Assessment will summarize course offerings and analyze contents of course cluster descriptions using data from the University Registrar and the Office of Undergraduate Education. • Design, facilitation, and analysis of focus groups and course evaluations will be carried out by the Office of Institutional Research & Assessment and the Center for Teaching & Learning. 	<ul style="list-style-type: none"> • Course cluster proposals and experiences offered will reveal a variety of interdisciplinary learning opportunities. • Faculty and student feedback will indicate that course cluster experiences were consistent with the stated objectives.
<ul style="list-style-type: none"> • Establish a Connections Center to coordinate and publicize opportunities for students to make connections between their curricular and extracurricular activities. 	<ul style="list-style-type: none"> • Survey faculty and students concerning their awareness of the services offered by the Connections Center. • Summarize listings of activities publicized through the Connections Center to determine breadth of potential experiences being offered to students. 	<ul style="list-style-type: none"> • Surveys will be designed and administered by the Office of Institutional Research & Assessment in cooperation with the Connections Center staff. • Content analysis of activities data will be conducted by the Office of Institutional Research & Assessment. 	<ul style="list-style-type: none"> • Survey results will indicate high levels of faculty and student awareness of the Connections Center. • Content analysis will reveal a wide variety of activities being promoted through the Connections Center.
<ul style="list-style-type: none"> • Strengthen advising resources to promote student awareness and understanding of opportunities for interdisciplinary or connected learning experiences. 	<ul style="list-style-type: none"> • Add items to existing surveys on advising to capture the extent to which students report that advisors shared information on opportunities for interdisciplinary or connected learning experiences. 	<ul style="list-style-type: none"> • The revised surveys will be administered and analyzed by the Office of Institutional Research & Assessment in cooperation with the Office of Undergraduate Education. 	<ul style="list-style-type: none"> • Survey results will reflect high levels of agreement among students that advisors were helpful in directing them to opportunities for making connections in their learning.

Goal of the Curricular Innovations Component: To enhance students' ability to make connections between various forms of knowledge and experiences through a series of curricular innovations related to the implementation of the new General Education requirements being implemented in the 2006 Fall semester.			
Program Objectives, Participation Goals, and Student Learning Outcomes	Assessment Methods	Implementation and Data Collection	Performance Criteria
Participation Goals			
<ul style="list-style-type: none"> Capacity enrollment in the Maymester and three-course interdisciplinary clusters and an increase in the numbers of these experiences offered each year. Student participation in the Maymester and three-course interdisciplinary clusters reflects the diversity of the undergraduate population. 	<ul style="list-style-type: none"> Track enrollment by semester in the designated courses. Compare demographic and academic characteristics of participants and non-participants. 	<ul style="list-style-type: none"> Tallied by the Office of Institutional Research & Assessment using data provided by the University Registrar. 	<ul style="list-style-type: none"> Student enrollments and number of Maymester and course clusters offered will increase each semester. Participating students will be representative of the undergraduate student body.
<ul style="list-style-type: none"> Participation of faculty from a variety of disciplines in integrated learning experiences and course clusters. 	<ul style="list-style-type: none"> Count participating faculty members, as well as the number of academic disciplines represented. Analyze course evaluation data collected from participating faculty to determine their level of satisfaction and their interest in offering future experiences. 	<ul style="list-style-type: none"> Faculty participation data to be compiled and summarized by the Office of Undergraduate Education. The Office of Institutional Research & Assessment and the Center for Teaching & Learning will design, administer, and analyze results of faculty course evaluations. 	<ul style="list-style-type: none"> Increase in faculty participation from a variety of discipline areas. Course evaluation responses will reveal high levels of faculty satisfaction with the experience and a desire to continue their participation.
<ul style="list-style-type: none"> Extensive use by faculty and students of services offered by the Connections Center. 	<ul style="list-style-type: none"> Collect and summarize contacts and referrals. Track "hits" to website. Track student and faculty attendance at colloquia. Track listserv subjects and participation levels. Collect and analyze use statistics for indexed course listings database. 	<ul style="list-style-type: none"> Usage and participation data to be maintained by Connections Center staff and compiled each semester. 	<ul style="list-style-type: none"> Number of student and faculty contacts with and referrals to the Connections Center will increase each year. Attendance at colloquia will increase each year. Use of website, listserv, and indexed course listings will increase each year.
Student Learning Outcomes			
<ul style="list-style-type: none"> Students who participate in the Maymester will demonstrate an enhanced ability to integrate various approaches to learning and sources of knowledge in the exploration of a single theme. 	<ul style="list-style-type: none"> Using a sample of Maymester participants, conduct a comparative analysis of the final paper from a Maymester course and a final paper in a regular course in a related discipline. A rubric will be used to rate the extent to which integrated approaches to learning and sources of knowledge were used in the analysis of a single theme or problem. Analysis of interviews of Maymester participants describing how the experience contributed to their ability to link approaches and knowledge sources. 	<ul style="list-style-type: none"> Faculty in the College of Arts & Sciences will create and use rubrics to rate the student papers, and conduct student interviews. The Office of Institutional Research & Assessment and the Center for Teaching & Learning will identify sample papers from the portfolios for faculty review, arrange interviews, analyze the data, and report the results. 	<ul style="list-style-type: none"> Papers from Maymester courses will be rated higher than those from other courses in integration of approaches and knowledge. Interviewees will report increased awareness of how integrating approaches and knowledge contribute to enhanced understanding of a theme or problem.

Goal of the Curricular Innovations Component: To enhance students' ability to make connections between various forms of knowledge and experiences through a series of curricular innovations related to the implementation of the new General Education requirements being implemented in the 2006 Fall semester.			
Program Objectives, Participation Goals, and Student Learning Outcomes	Assessment Methods	Implementation and Data Collection	Performance Criteria
<ul style="list-style-type: none"> Students who participate in the three-course interdisciplinary clusters will demonstrate greater ability to incorporate and connect interdisciplinary knowledge and perspectives in their academic work. 	<ul style="list-style-type: none"> Using a sample of interdisciplinary course cluster participants, conduct a comparative analysis of papers from cluster courses and a final paper in a regular course in a related discipline. A rubric will be used to rate the extent to which the work incorporated and connected interdisciplinary knowledge and perspectives. Analyze interviews of interdisciplinary course cluster participants describing how the experience contributed to their ability to incorporate and connect interdisciplinary knowledge and perspectives in their work. 	<ul style="list-style-type: none"> Faculty in the College of Arts & Sciences will create and use rubrics to rate the student papers, and conduct student interviews. The Office of Institutional Research & Assessment and the Center for Teaching & Learning will identify sample papers from the portfolios for faculty review, develop interview protocols in cooperation with the Office of Undergraduate Education, analyze the data, and report the results. 	<ul style="list-style-type: none"> Papers from interdisciplinary cluster participants will receive higher average ratings than papers from non-participants on integration of approaches to learning and sources of knowledge used. Interviewees will report increased appreciation of the importance of connecting interdisciplinary knowledge and perspectives in their learning.
<ul style="list-style-type: none"> Students using the Connections Center will enrich and expand their learning experiences at Carolina as a result of discovering courses, experiential opportunities, co-curricular activities, and new ideas in their areas of interest. 	<ul style="list-style-type: none"> Analyze items added to existing surveys concerning student success in using the resources of the Connections Center to expand their learning experiences. Summarize cohort study participant responses to interview questions asking for examples of use of Connections Center resources and impact on learning. 	<ul style="list-style-type: none"> The Office of Institutional Research & Assessment will add survey items designed by the Connections Center staff and analyze the survey results. The Office of Institutional Research & Assessment and the Center for Teaching & Learning will develop interview protocols in cooperation with the Office of Undergraduate Education, analyze the data, and report the results. 	<ul style="list-style-type: none"> Feedback from surveys and cohort study interviews will indicate that student learning was enhanced in a variety of ways through participation in activities promoted through the Connections Center.
<ul style="list-style-type: none"> Students will maximize learning opportunities with the help of their academic advisors. The advisors will help students choose meaningfully connected courses and experiential activities that enable them to explore their personal interests within the requirements for the new curriculum. 	<ul style="list-style-type: none"> Analyze items on existing student surveys rating effectiveness of advisors in helping to design a program of study that fulfilled personal goals and met requirements of the new curriculum. Summarize cohort study participant responses to interview questions concerning the role of advisors in helping them identify opportunities for interdisciplinary and experiential learning. 	<ul style="list-style-type: none"> The Office of Institutional Research & Assessment will analyze results of advising-related survey items. The Office of Institutional Research & Assessment and Center for Teaching & Learning will develop interview protocols in cooperation with Office of Undergraduate Education, analyze, and report results. 	<ul style="list-style-type: none"> Students will report that advisors were instrumental in helping them develop a meaningful program of study.

Assessment Plan for the Undergraduate Research Component of Making Critical Connections

<p>Goal of the Undergraduate Research Component: To make research, mentored scholarship and creative performance distinctive features of a Carolina undergraduate education, through the development of new opportunities and methods for engaging these students.</p>			
Program Objectives, Participation Goals, and Student Learning Outcomes	Assessment Methods	Implementation and Data Collection	Performance Criteria
<i>Program Objectives</i>			
<ul style="list-style-type: none"> Build, support, and expand undergraduate opportunities to engage in research, mentored scholarship, and creative performance through the appointment of term "Undergraduate Research Professors." 	<ul style="list-style-type: none"> Search committee will evaluate submitted applications using a list of ideal characteristics identified by faculty with special interest in undergraduate research. Evaluate performance of Undergraduate Research Professors at the end of five years. 	<ul style="list-style-type: none"> The Office of Undergraduate Research, in conjunction with the College of Arts & Sciences, will oversee the search for these positions. The Office of Undergraduate Research, in conjunction with the College of Arts & Sciences, will assemble a review committee of peers to assess performance after five years. 	<ul style="list-style-type: none"> Four Undergraduate Research Professors will be hired to reflect each of four divisions in the College of Arts & Sciences (Fine Arts, Humanities, Natural Sciences & Mathematics, Social & Behavioral Sciences), together with their matched professional schools. After five years, all Undergraduate Research Professors will receive a favorable review of their involvement and performance with respect to undergraduate research.
<ul style="list-style-type: none"> Introduce four linked series of undergraduate courses with a major focus on conducting research ("Research Tracks"). 	<ul style="list-style-type: none"> Establish specifications for Research Tracks and their component courses and develop a rubric to judge courses on their methodological content. Create a form to document a department's commitment to establish or contribute to a Research Track. 	<ul style="list-style-type: none"> The Office of Undergraduate Research and the new Undergraduate Research Professors will work with the Office of Institutional Research & Assessment to develop forms and rubrics. The Office of Undergraduate Research will oversee the establishment of the Research Tracks, work with faculty and graduate students who are instructors of record in participating departments, assess the qualities of the Tracks, and report findings. 	<ul style="list-style-type: none"> Four Research Tracks will be established, one in each of four divisions in the College of Arts & Sciences (Fine Arts, Humanities, Natural Sciences & Mathematics, Social & Behavioral Sciences), with at least four new methodology courses (disciplinary or interdisciplinary). See "Participation Goals" (below).
<ul style="list-style-type: none"> Increase the course offerings in which undergraduate students carry out original research projects, using Graduate Research Consultants. 	<ul style="list-style-type: none"> Develop a rubric to judge courses on attributes related to the conduct of original research projects. Create a form to document professors' commitment to incorporate Graduate Research Consultants into their courses Count course offerings involving original research and the use of Graduate Research Consultants. 	<ul style="list-style-type: none"> The Office of Undergraduate Research and the new Undergraduate Research Professors will work with the Office of Institutional Research & Assessment, the Center for Teaching & Learning, and the directors of undergraduate studies in each department to develop forms and rubrics. The Office of Undergraduate Research will oversee the establishment of research courses with Graduate Research Consultants, assess their qualities, and report findings. 	<ul style="list-style-type: none"> Thirty research courses per year using Graduate Research Consultants will be taught by 2011. See "Participation Goals" (below).

Goal of the Undergraduate Research Component: To make research, mentored scholarship and creative performance distinctive features of a Carolina undergraduate education, through the development of new opportunities and methods for engaging these students.			
Program Objectives, Participation Goals, and Student Learning Outcomes	Assessment Methods	Implementation and Data Collection	Performance Criteria
<ul style="list-style-type: none"> Enhance the opportunities for undergraduate students to be mentored in original research. 	<p><i>Graduate Student and Postdoctoral Mentors</i></p> <ul style="list-style-type: none"> Evaluate potential mentors using a rubric containing ideal characteristics of research mentors. Count qualified mentors in the pool of potential mentors identified by the Office of Undergraduate Research. <p><i>Summer Undergraduate Research Fellowships (SURFs)</i></p> <ul style="list-style-type: none"> Identify additional potential funding sources for the SURFs. <p><i>Departmental Planning and Commitments</i></p> <ul style="list-style-type: none"> Analyze existing barriers to undergraduate mentoring for College of Arts & Sciences and professional school faculty. Evaluate the success of efforts to create mechanisms for students to obtain course credit for undergraduate research in departments or professional schools where there is not an existing mechanism. Create a form to document departmental commitment to sponsor undergraduate research (now or in the future) and to acknowledge faculty mentoring of undergraduates. 	<ul style="list-style-type: none"> The Office of Undergraduate Research and the new Undergraduate Research Professors will work with the Office of Institutional Research & Assessment and the Office of Postdoctoral Services to develop forms and rubrics. The Office of Undergraduate Research and the new Undergraduate Research Professors will identify mentor criteria, evaluate mentors, interact with potential mentors, collect data, and report findings. The Office of Undergraduate Research will publicize the expanded opportunities for SURFs, oversee the award process, and report findings. The Office of Institutional Research & Assessment will provide enrollment data for the four new courses in the professional schools. The appropriate dean in each college or school will monitor departmental plans to acknowledge faculty mentoring. 	<ul style="list-style-type: none"> A total of 200 graduate mentors will be involved by 2011. A total of 100 postdoctoral mentors will be involved by 2011. Every graduate student and post-doctoral mentors will receive a commendation letter about their undergraduate mentoring from the Office of the Provost. At least one workshop a year will be conducted for new research mentors and graduate student consultants. Workshops will feature best practices of experienced mentors. A total of 100 SURFs per summer will be awarded by 2011. To reduce barriers, four new courses will be developed in departments or professional schools that do not have undergraduate programs. All (100%) of the departmental plans to acknowledge faculty mentoring are approved by the appropriate dean.
Participation Goals			
<ul style="list-style-type: none"> Increase undergraduate student enrollment in the Research Track courses, including enrollments of African American, Native American, and Hispanic/Latino/a students 	<ul style="list-style-type: none"> Track registration by semester in Research Track courses. 	<ul style="list-style-type: none"> The Office of Institutional Research & Assessment will provide enrollment data. 	<ul style="list-style-type: none"> A minimum of 100 students will be enrolled in a Research Track by 2011.
<ul style="list-style-type: none"> Increase undergraduate student enrollment in courses requiring original research projects and using Graduate Research Consultants, including enrollments of African American, Native American, and Hispanic/Latino/a students. 	<ul style="list-style-type: none"> Track registration by semester in courses requiring original research projects. 	<ul style="list-style-type: none"> The Office of Institutional Research & Assessment will provide enrollment data. 	<ul style="list-style-type: none"> A minimum of 600 students will be enrolled per year in courses requiring original research and using Graduate Research consultants by 2011.

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<p>Goal of the Undergraduate Research Component: To make research, mentored scholarship and creative performance distinctive features of a Carolina undergraduate education, through the development of new opportunities and methods for engaging these students.</p>			
Program Objectives, Participation Goals, and Student Learning Outcomes	Assessment Methods	Implementation and Data Collection	Performance Criteria
<ul style="list-style-type: none"> Increase undergraduate student participation in mentored research, including participation by African American, Native American, and Hispanic/Latino/a students. 	<ul style="list-style-type: none"> Track participation in research by year. 	<ul style="list-style-type: none"> The Office of Institutional Research & Assessment will provide enrollment data. <p><i>Student Research Involvement</i></p> <ul style="list-style-type: none"> The Office of Undergraduate Research, the College of Arts & Sciences, and the Office of Institutional Research & Assessment will obtain data from the online faculty annual reporting system on the number of students that each faculty member mentors in undergraduate research activities. 	<ul style="list-style-type: none"> By the year 2011, a minimum of 1,000 students will be engaged in undergraduate research, including students who are enrolled in Research Track Courses.
<p>Student Learning Outcomes</p>			
<ul style="list-style-type: none"> Undergraduate students completing a Research Track should be able to examine unsolved problems, show understanding of multiple modes of inquiry, and demonstrate research skills. 	<p><i>Student Work</i></p> <ul style="list-style-type: none"> Assess student research projects and oral presentations from Research Track Courses using rubrics. <p><i>Student Experience</i></p> <ul style="list-style-type: none"> Conduct "end-of-Track" focus groups with students completing a Research Track. <p><i>Faculty Experience</i></p> <ul style="list-style-type: none"> Conduct end-of-semester interviews with faculty members teaching Research Track Courses, with a special emphasis on "end-of-Track" professors. 	<ul style="list-style-type: none"> The Office of Undergraduate Research and the new Undergraduate Research Professors will work with the Office of Institutional Research & Assessment to develop rubrics for research quality and oral presentation quality. The Office of Undergraduate Research will oversee the assessment of student work in the last course of a Research Track. The Office of Undergraduate Research will work with the Office of Institutional Research & Assessment to conduct focus groups and interviews. Professors teaching the last course in a Research Track will rate student oral presentations of final projects using a rubric designed by the Office of Undergraduate Research. 	<p><i>Student Work</i></p> <ul style="list-style-type: none"> 80% (minimum) of the research projects will receive ratings of 4 or 5 by the special review panel (on a 5-point quality scale, where 5 is the highest rating). <p><i>Student Experience</i></p> <ul style="list-style-type: none"> 90% (minimum) of the students indicate that they would choose to take the Research Track again, would recommend it to friends, and believe that their experience was "very" or "extremely" valuable. <p><i>Faculty Experience</i></p> <ul style="list-style-type: none"> 90% (minimum) of the "end-of-Track" faculty report that the Research Track had a positive impact on the quality of student work in their course.

<p>Goal of the Undergraduate Research Component: To make research, mentored scholarship and creative performance distinctive features of a Carolina undergraduate education, through the development of new opportunities and methods for engaging these students.</p>			
<p>Program Objectives, Participation Goals, and Student Learning Outcomes</p>	<p>Assessment Methods</p>	<p>Implementation and Data Collection</p>	<p>Performance Criteria</p>
<ul style="list-style-type: none"> Students completing courses requiring original research using Graduate Research Consultants should be able to examine unsolved problems, show understanding of multiple modes of inquiry, and demonstrate research skills. 	<p><i>Student Work</i></p> <ul style="list-style-type: none"> Assess student research projects from a subset of courses with Graduate Research Consultants using a rubric. <p><i>Student and Graduate Research Consultant Experiences</i></p> <ul style="list-style-type: none"> Conduct focus groups with a subset of students enrolled in courses utilizing Graduate Research Consultants Conduct focus groups with Graduate Research Consultants. Include questions about the effectiveness of the Graduate Research Consultants on the Carolina Course Evaluation. <p><i>Faculty Experiences</i></p> <ul style="list-style-type: none"> Conduct short interviews with faculty who taught courses using Graduate Research Consultants. 	<p><i>Student Work</i></p> <ul style="list-style-type: none"> The Office of Undergraduate Research will assemble a panel of judges consisting of former Graduate Research consultants to rate student work from courses. <p><i>Student, Graduate Research Consultant, and Faculty Experiences</i></p> <ul style="list-style-type: none"> The Office of Undergraduate Research will work with the Office of Institutional Research & Assessment to conduct the focus groups and interviews. The Office of Undergraduate Research, with the assistance of the Center for Teaching & Learning, will compile data from the Graduate Research Consultant items from the Carolina Course Evaluation. 	<p><i>Student Work</i></p> <ul style="list-style-type: none"> 80% (minimum) of the research projects will receive a rating of 4 or 5 on a quality scale (on a 5-point scale where 5 is the highest rating). <p><i>Student and Graduate Research Consultant Experiences</i></p> <ul style="list-style-type: none"> Focus group results demonstrate high student engagement with the Graduate Research Consultants and enjoyment of the research component of the course. 4 rating or above (on a 5-point scale where 5 is the highest rating) on the Carolina Course Evaluation items about the effectiveness of the Graduate Research Consultants. 90% (minimum) of the Graduate Research Consultants state that their experience was "very" or "extremely" valuable. <p><i>Faculty Experiences</i></p> <ul style="list-style-type: none"> 90% (minimum) of the faculty indicate that they would use the Graduate Research Consultant model again.
<ul style="list-style-type: none"> Mentoring will have a positive impact on students' ability to develop research ideas and conduct their own research. 	<p><i>Student and Mentor Experiences</i></p> <ul style="list-style-type: none"> Interview students and mentors regarding perceptions of mentor involvement in the research process. Analyze student reflective statements about the process of research before and after receiving fellowship support. <p><i>Student Research Involvement</i></p> <ul style="list-style-type: none"> Analyze responses to the National Survey of Student Engagement (NSSE) item that asks whether students "Work on a research project with a faculty member outside of course or program requirements." Count mentor-sponsored scholarship from the mentor pool (e.g., undergraduate authorship on publications and presentations). 	<p><i>Student and Mentor Experiences</i></p> <ul style="list-style-type: none"> The Office of Undergraduate Research, with assistance from the Office of Institutional Research & Assessment, will interview mentors and mentees. The Office of Undergraduate Research, with assistance from the Office of Institutional Research & Assessment, will evaluate students' ratings of their mentors and mentors' ratings of research involvement with their students. The Office of Undergraduate Research, with the assistance of the Office of Institutional Research & Assessment, will collect and analyze written reflective statements from undergraduates who receive fellowship support. <p><i>Student Research Involvement</i></p> <ul style="list-style-type: none"> The Office of Undergraduate Research, the College of Arts & Sciences, and the Office of Institutional Research & Assessment will obtain data from the online faculty annual reporting system on mentoring activities, as well as on student co-authored publications and off-campus presentations. 	<p><i>Student and Mentor Experiences</i></p> <ul style="list-style-type: none"> 80% (minimum) of the mentor-mentee relationships should be rated as positive and productive by the panel of judges. <p><i>Student Research Involvement</i></p> <ul style="list-style-type: none"> 50% of the undergraduate students who take the NSSE should indicate that they have "worked on a research project with a faculty member outside of course or program requirements." 50% of the mentors in the Office of Undergraduate Research mentor pool will have at least one example of research scholarship with their undergraduate mentee over a five year period. At least 250 co-authored publications or off-campus presentations per year of undergraduate research, mentored scholarship, or creative performance will be made by 2011.

Assessment Plan for the Internationalization Component of Making Critical Connections

Goal of the Internationalization Component: To integrate an intercultural and global dimension into the purpose and function of education at UNC-Chapel Hill in a manner consistent with both our core values as a public institution and the furtherance of a sense of global citizenship among our intramural and extramural constituents.			
Program Objectives, Participation Goals, and Student Learning Outcomes	Assessment Methods	Implementation and Data Collection	Performance Criteria
Program Objectives			
<ul style="list-style-type: none"> • Improve the international infrastructure at UNC-Chapel Hill to facilitate opportunities for students to develop international and intercultural competencies. 	<ul style="list-style-type: none"> • Conduct semi-annual content analysis of depth and breadth of information available on International Affairs website. • Track “hits” to the International Affairs website. • Analyze the return on investment from hiring development staff, in terms of funds raised for international research, teaching, and public service. • Analyze the return on investment from hiring communications staff, in terms of success in increasing the visibility of UNC-Chapel Hill’s international accomplishments. • Collect data on the number of students served by the newly added ESL trainer and teaching assistant positions in the Writing Center. • Assess the quality of writing samples of international students at the beginning and end of their training through the Writing Center using a rubric and examine differences. • Evaluate the effectiveness of the International Teaching Assistant support program by comparing teaching evaluation results over time. • Design methods for determining the effectiveness of ESL services offered to families of international faculty, students, and other affiliates. • Count international faculty, students, and others assisted in locating housing. 	<ul style="list-style-type: none"> • The University Center for International Studies will collect and summarize most of the data related to infrastructure activities. The Center for Teaching & Learning, in cooperation with the Writing Center, will analyze data on the effectiveness of the academic support services offered to international faculty, students, and families. 	<ul style="list-style-type: none"> • The contents of the International Affairs website will increase in response to UNC-Chapel Hill’s growing number of programs, activities, and achievements. The “hits” on the website will also increase. • Development staff hires will result in a significant increase of funds available for enhancing internationalization efforts at UNC-Chapel Hill. • First-year review of accomplishments of new communications staff will reveal a variety of productive strategies in place for increasing the University’s visibility in internationalization. • First-year evaluation results from the implementation of new academic support services will be used both to further refine these programs and to serve as baseline data for determining improvement in outcomes in subsequent years. • The number of international individuals and families locating housing as a result of services provided will increase.
<ul style="list-style-type: none"> • Enhance financial support for international research, which will in turn provide more students with opportunities to be actively engaged in addressing questions related to global issues. 	<ul style="list-style-type: none"> • Chart trends in new and continuing sponsored research awards received annually by all international research initiatives, centers, and institutes. • Chart trends in donor support for international research-related initiatives. 	<ul style="list-style-type: none"> • The University Center for International Studies will collect and summarize the data on financial support, in cooperation with the sponsored research and development offices on campus. 	<ul style="list-style-type: none"> • The Associate Provost for International Affairs will set targets for future years.

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Assessment of the QEP

Goal of the Internationalization Component: To integrate an intercultural and global dimension into the purpose and function of education at UNC-Chapel Hill in a manner consistent with both our core values as a public institution and the furtherance of a sense of global citizenship among our intramural and extramural constituents.			
Program Objectives, Participation Goals, and Student Learning Outcomes	Assessment Methods	Implementation and Data Collection	Performance Criteria
<ul style="list-style-type: none"> Embed internationalization more deeply into the curriculum. 	<ul style="list-style-type: none"> Analyze trends in funding for study abroad program development, scholarships, and financial aid. Evaluate the quality and appropriateness of current study abroad programs. Analyze policies for awarding credit for coursework taken abroad. Track the number and proportion of internationally-oriented courses in the General Education curriculum and in upper level majors, and the growth in these numbers over time. Count new course proposals that include international content or activities. Analyze items on locally-developed survey of faculty concerning the extent to which their courses include international themes. Track the development of institutional collaborations on joint programs and degrees with international components. 	<ul style="list-style-type: none"> The University Center for International Studies will collect and summarize data related to the funding of study abroad initiatives. The Office of Undergraduate Education will collect data and evaluate study abroad program quality, analyze policies for awarding credit for coursework taken abroad, and maintain counts of new course proposals with international themes. The Office of Institutional Research & Assessment will analyze and report survey data and summarize international course offerings and enrollments using data from the University Registrar. 	<ul style="list-style-type: none"> Additional funding will result in the expansion of study abroad opportunities and resources to more students. The overall quality of study abroad programs will be found to be high. The Office of Undergraduate Education will determine the need for changes in policies and procedures concerning credit for coursework taken abroad. The number of internationally-oriented courses offered and proposed will increase each year. Faculty survey results regarding inclusion of international themes in courses will be used as a baseline measure when the survey is repeated in two years. Opportunities for participation in joint programs that offer students international exposure will increase.
<ul style="list-style-type: none"> Increase the number and proportion of international faculty, postdoctoral fellows, graduate and professional students, and undergraduate students at UNC-Chapel Hill. 	<ul style="list-style-type: none"> Count international faculty, postdoctoral fellows, graduate and professional students, and undergraduate students at UNC-Chapel Hill each fall and chart trends. 	<ul style="list-style-type: none"> The University Center for International Studies will identify and count international faculty and postdoctoral fellows. The Office of Institutional Research & Assessment will provide student counts. 	<ul style="list-style-type: none"> The number and proportion of international faculty and students will increase each year.
<ul style="list-style-type: none"> Enhance our overall progress in internationalizing UNC-Chapel Hill. 	<ul style="list-style-type: none"> Re-administer the five locally-developed "international" surveys begun in 2004-05 on a biennial basis. Chart trends in data collected for institutional metrics specified in the Measures of Excellence and Academic Plan as key indicators of progress in internationalization. 	<ul style="list-style-type: none"> Surveys will be developed and administered by the Office of Institutional Research & Assessment in cooperation with the University Center for International Studies. The Office of Institutional Research & Assessment will collect metrics data from various sources and prepare graphs. 	<ul style="list-style-type: none"> Using the 2004-05 responses as a baseline for comparison, 2006-07 responses will reflect broad consensus that UNC-Chapel Hill has made continuous improvement in internationalization, and has reduced the number and severity of obstacles to internationalization. UNC-Chapel Hill's performance in relation to the institutional metrics will show consistently positive trends over time.
Participation Goals			
<ul style="list-style-type: none"> Increase the number and percentage of undergraduates who participate in study abroad programs. 	<ul style="list-style-type: none"> Track registrations in UNC-Chapel Hill sponsored study abroad programs. Analyze the responses to NSSE items related to study abroad participation. Analyze the responses to locally-developed surveys with items related to study abroad. 	<ul style="list-style-type: none"> The Office of Institutional Research & Assessment will provide enrollment data and analyze the responses to survey items. 	<ul style="list-style-type: none"> The number and percentage of UNC-Chapel Hill undergraduates who participate in study abroad will increase each year.

<p>Goal of the Internationalization Component: To integrate an intercultural and global dimension into the purpose and function of education at UNC-Chapel Hill in a manner consistent with both our core values as a public institution and the furtherance of a sense of global citizenship among our intramural and extramural constituents.</p>			
<p>Program Objectives, Participation Goals, and Student Learning Outcomes</p>	<p>Assessment Methods</p>	<p>Implementation and Data Collection</p>	<p>Performance Criteria</p>
<ul style="list-style-type: none"> Increase the number and percentage of undergraduates who pursue international research projects. 	<ul style="list-style-type: none"> Analyze the data on undergraduates enrolled in Research Tracks and other courses requiring original research in order to tabulate the number of students who are pursuing projects with international themes. 	<ul style="list-style-type: none"> The University Center for International Studies will compile these data in cooperation with the Office of Undergraduate Research. 	<ul style="list-style-type: none"> The number and percentage of undergraduates who pursue international research projects will increase each year.
<ul style="list-style-type: none"> Increase the number and proportion of students who complete foreign language training through level 4. 	<ul style="list-style-type: none"> Track enrollments and completions for level 4 language courses. 	<ul style="list-style-type: none"> The Office of Institutional Research & Assessment will provide course enrollment data. 	<ul style="list-style-type: none"> The number and proportion of students who complete foreign language training through level 4 will increase each year.
<p>Student Learning Outcomes</p>			
<ul style="list-style-type: none"> Undergraduate students who participate in study abroad will demonstrate increased international and intercultural competencies, a stronger sense of global citizenship, and an enhanced ability to make connections between their learning at UNC-Chapel Hill and the larger world. 	<ul style="list-style-type: none"> Design and administer pre- and post-experience questionnaires to study abroad participants in order to measure changes in self-assessments of international and intercultural competencies and students' sense of their "global citizenship." Analyze the data from interviews conducted with cohort study members who participated in study abroad to identify ways in which the experience enabled them to make connections between their coursework and global issues. 	<ul style="list-style-type: none"> The Office of Institutional Research & Assessment will design the pre- and post-experience questionnaire in cooperation with the Study Abroad director and the Office of Undergraduate Education, and will analyze the results. The Office of Institutional Research & Assessment will develop and administer interview protocols in consultation with the Study Abroad Director. 	<ul style="list-style-type: none"> Results of the pre- and post-test comparisons will reveal significant gains in student self-assessments of competency attributed to the study abroad experience. Analysis of interviews will provide a number of examples of ways in which study abroad experiences enabled students to make connections to global concerns.
<ul style="list-style-type: none"> Students completing research projects related to international issues will be able to examine problems and formulate research questions from a global perspective. 	<ul style="list-style-type: none"> Assess student research projects and oral presentations from Research Track Courses using a rubric that includes attributes related to understanding the research problem from a global perspective. Conduct focus groups with students conducting research on international issues to identify ways in which the experience encouraged them to consider other connections between research and global issues. 	<ul style="list-style-type: none"> The University Center for International Studies will work with the Office of Undergraduate Research and the Office of Institutional Research & Assessment to add global perspective attributes to the research skills rubric. (See the Assessment Plan for Undergraduate Research Component.) These three groups will also collaborate on development of focus group protocols. 	<ul style="list-style-type: none"> 80% (minimum) of the research projects will receive a rating of 4 or 5 on a quality scale (on a 5-point scale where 5 is the highest rating) on the global perspectives attributes. Focus group results will indicate that the research experience was instrumental in stimulating thinking about the role of research in addressing global problems.

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
 Assessment of the QEP

Goal of the Internationalization Component: To integrate an intercultural and global dimension into the purpose and function of education at UNC-Chapel Hill in a manner consistent with both our core values as a public institution and the furtherance of a sense of global citizenship among our intramural and extramural constituents.			
Program Objectives, Participation Goals, and Student Learning Outcomes	Assessment Methods	Implementation and Data Collection	Performance Criteria
<ul style="list-style-type: none"> Students who matriculate under the new General Education curriculum will demonstrate better-developed international and intercultural competencies, an enhanced sense of their "global citizenship," and a greater ability to make connections between their learning at UNC-Chapel Hill and the world than earlier cohorts. 	<ul style="list-style-type: none"> Administer survey to compare self-reported international-related competencies and attitudes between seniors exposed to the old curriculum and those exposed to the new curriculum beginning in fall 2006. Conduct transcript analysis to compare cohorts on number and types of courses and credit-bearing experiences with international content. Conduct comparative analysis of samples of capstone papers from specific courses collected from graduates of the old and new curriculum using a rubric that rates ability to take a global perspective in analyzing issues. Interview a sample of seniors who matriculated under the old curriculum and those in the 2006 entering class cohort study concerning the impact of their studies on their ability to make connections to international issues. 	<ul style="list-style-type: none"> The Office of Institutional Research & Assessment will design and administer the survey in cooperation with the University Center for International Studies and the Office of Undergraduate Education, and will analyze the results. The Office of Institutional Research & Assessment will conduct transcript analyses. Faculty in the College of Arts & Sciences will develop rubrics for rating capstone courses' papers and will conduct comparative analyses. The Office of Undergraduate Education and the University Center for International Studies will work with the Office of Institutional Research & Assessment to design and conduct interviews with seniors. 	<ul style="list-style-type: none"> After controlling for differences in entry characteristics, students matriculating under the new curriculum will report a higher level of international and intercultural competencies and related attributes than those who completed the old curriculum. A positive correlation will exist between the number of international-related credit-bearing courses taken and responses to the senior survey. Capstone paper analysis will reveal that students completing the new curriculum exhibit a greater ability to incorporate global perspectives in addressing problems than those students who completed the old curriculum. Analysis of interviews will confirm that students in the 2006 entering cohort are able to describe more connections between their coursework and international issues.



Budget Statement

Resources for **Making Critical Connections**, UNC-Chapel Hill's Quality Enhancement Plan (QEP), will be obtained from a variety of sources, including new allocations made during the annual budget process (overseen by the Executive Vice Chancellor and Provost), reallocation of current expenditures, and fund-raising efforts undertaken in support of specific elements of the Plan. Additional revenue may also be generated in the future by various elements of the Plan, in particular the Maymester. (UNC-Chapel Hill's Summer School is funded on a receipt basis, and at this stage the University envisions the Summer School office administering much of the Maymester program.)

Creating the QEP generated many worthy ideas, some of which require further study. Thus, some specific resource allocations for the Plan will depend on the completion of needs assessments of certain elements of the Plan (for example, the Connections Center and the Submester scheduling alternative). All of the initiatives will be subject to on-going formative evaluation, after which some will receive continued or even increased support, while others will cease.

Since the adoption of the QEP coincides with the implementation of a new set of General Education requirements at the University, some facets of the QEP budget overlap with aspects of the new curriculum. Therefore, funding dedicated to the new curriculum implementation will overlap with funding for **Making Critical Connections** in certain areas.

The University's deadline for submitting its QEP precedes the completion of the annual budget process at UNC-Chapel Hill; therefore, it is not possible to submit final budget details with the rest of the Plan. Complete details of the proposed QEP budget will be provided to the review committee members when they arrive for the site visit on April 11, 2006.



Making Critical Connections Timeline

The timeline for **Making Critical Connections** identifies milestones for the tripartite initiatives in the University's QEP: curricular innovation, undergraduate research, and internationalization. The major tasks include charging and appointing committees, creating position descriptions and hiring personnel, launching development efforts, and coordinating the major initiatives that impact the established curriculum mechanisms. In addition, the timeline contains annual report and evaluation deadlines. The University of North Carolina at Chapel Hill has an established procedure for making annual budget requests through the Executive Vice Chancellor and Provost. It also has a formal process for reviewing curricular changes, with deadlines each academic year on September 15 and January 15. Therefore, the timeline does not specify either budget or curricular deadlines. This timeline will be updated every March as part of the annual **Making Critical Connections** report to the Faculty Council and other University administrative units.

After the review of the 2006 Quality Enhancement Plan by the SACS on-site committee, the following timeline will begin.

Summer 2006

- Appoint **Making Critical Connections** Implementation Committee.
- Recruit Maymester support staff in the Summer School office to plan the pilot program and course submission.
- Evaluate implementation strategies for the Research Tracks. This process will parallel the development of the "Integrative Option: Interdisciplinary Cluster Program" in the new General Education requirements.
- Develop guidelines for graduate and postdoctoral students who serve as mentors for undergraduates involved in their own research programs.
- Offer workshop to graduate and postdoctoral students selected as undergraduate research mentors.
- Issue invitations to entering first-year students to participate in the Longitudinal Cohort Study.
- Recruit an ESL specialist to work in the Writing Center.

Fall 2006

- Issue call for courses for the 2007 Maymester pilot program.
- Add focused "connections questions" to student course evaluations, instructor/advisor surveys, and exit questionnaires.
- Incorporate the new "Undergraduate Research Professors" into term professorship process; launch development efforts to fund them.
- Issue invitations to chairs to appoint "Undergraduate Research Liaisons."
- Begin Longitudinal Cohort Study with four hundred incoming first-year students.
- Issue call to develop research methodology courses for the Research Tracks.

- Appoint and charge a committee to draft guidelines for undergraduate involvement in research (emphasizing experiential education). Initial efforts should focus on activities at the department level.
- Appoint and charge a committee to develop plans to acknowledge faculty who serve as mentors to undergraduates.
- Initiate expanded ESL services in the Writing Center.
- Charge a task force to consider ways to strengthen the relationship between the Academic Advising Program and the advising services provided in departments.

September 2006 -- March 2007

- Charge and appoint a committee to develop plans for a “Connections Center;” conduct an analysis of current services, staffing requirements, space needs, and possible administrative location for the Connections Center; consider how to support a website, begin a Connections listserv, launch a “Connections Colloquium” series, and develop and/or link indexed course listings.
- Issue a call to departments to identify and/or suggest possible Research Tracks.
- Begin the search for an Associate Director of the Office of Undergraduate Research.

Spring 2007

- Review recommendations concerning ways to acknowledge faculty members who mentor undergraduates.
- Submit department plans for increased involvement by undergraduates in research and additional courses to satisfy the “experiential education” requirement.
- Award ten additional summer undergraduate research fellowships, bringing the total to seventy.

March 2007

- Present first annual **Making Critical Connections** report to the Faculty Council and other University administrative units.
- Review the needs assessment for the “Connections Center.”
- Appoint the first two “Undergraduate Research Professors” effective July 1, 2007 (for three-year terms).

May 2007

- Offer the initial Maymester as a pilot program.
- Create the initial report on results of all assessments of the components of **Making Critical Connections** launched during the program’s first year.
- Review assessment results of the Maymester pilot. In light of these results, discuss the feasibility of implementing the other alternative scheduling possibilities (the Submester and Integrated Clusters options).
- Issue call for courses for the 2008 Maymester.

Summer 2007

- Conduct workshops for graduate and postdoctoral students selected as undergraduate research mentors.

Fall 2007

- Open the “Connections Center” (pending the results of the needs assessment conducted in 2006-2007).
- Implement recognition program for faculty who mentor undergraduates.
- Identify funding and space for additional positions (development officer, administrative assistant, communications staff, etc.) in the University Center for International Studies.
- Disseminate information about Research Tracks as part of the “Integrative Option: Interdisciplinary Cluster Program.”

Spring 2008

- Award ten additional summer undergraduate research fellowships, bringing the total to eighty.

March 2008

- Present second annual report of **Making Critical Connections** to the Faculty Council and other University administrative units.

May 2008

- Offer the 2008 Maymester.
- Create and review the second report on results of all assessments of the components of **Making Critical Connections**.

Fall 2008

- Issue the call for “Submester” and “Integrated Cluster” pilot course offerings (if alternate scheduling models are implemented).
- Review new courses offered by Graduate Research Consultants.
- Offer assistance to international visitors concerning housing options.
- Offer two additional sections of ESL course.

Fall 2008 -- Spring 2009

- Complete the expansion of the International Teaching Assistant program.
- Fill additional positions (development officer, administrative assistant, communications staff, etc.) in the University Center for International Studies.

Spring 2009

- Award ten additional summer undergraduate research fellowships, bringing the total to ninety.

March 2009

- Present the third annual report on **Making Critical Connections** to the Faculty Council and other University administrative units.

May 2009

- Expand Maymester offerings.
- Create and review the third report on results of all assessments of the components of **Making Critical Connections**.
- Appoint the second two “Undergraduate Research Professors” effective July 1, 2009 (for three-year terms).

Fall 2009 -- Spring 2010

- Develop and review additional courses containing research experiences and identify additional “Research Tracks.”

Spring 2010

- Award ten additional summer undergraduate research fellowships, bringing the total to one hundred.

March 2010

- Present the fourth annual **Making Critical Connections** report to the Faculty Council and other University administrative units.

Summer 2010

- Expand Maymester offerings.
- Create and review the fourth report on results of all assessments of the components of **Making Critical Connections**.

Fall 2010

- Prepare the fifth year review of **Making Critical Connections** (required by SACS for Quality Enhancement Plans).



Appendixes

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Appendix A: QEP Case Statement (April 2004)

Quality Enhancement Plan: Making Critical Connections

The curriculum, international presence, and research experiences for undergraduates at the University of North Carolina at Chapel Hill are the basis for the Quality Enhancement Plan that will be presented for review by the SACS Reaffirmation team in spring 2006.

These areas demonstrate the University's commitment to interdisciplinary work, support for diversity, reliance on ethical behavior, and commitment to public engagement. The proposed enhancements will extend the positive influence of honor and integrity on the teaching and learning process to student involvement in research and discovery both within and beyond the campus. The connections between Academic and Health Affairs, between graduate and undergraduate students, and among research, teaching, and service for the faculty and staff, will all be examined before the visit by the SACS re-accreditation team in spring 2006. Beginning in fall 2004, committees comprised of faculty, staff and students will study each area and make recommendations for ways to focus on and enhance these areas well into the future.

Curricular Innovation: The revised undergraduate curriculum, effective fall 2006, includes a requirement to connect the foundations (composition and rhetoric, quantitative reasoning, foreign language, lifetime fitness) and approaches (physical and life sciences, social and behavioral sciences, humanities and fine arts) in ways that eliminate traditional boundaries and allow unrestricted movement from the campus community into other ones - local, regional, national, and international. Intended to help undergraduates understand that what they learn in a specific course is not knowledge in isolation but part of a larger construct, "making connections" also suggests an important strategy for the entire University. Plans to enhance the curriculum would be created as would ways to evaluate its implementation.

Internationalization: The range of activities throughout the entire University (Health Affairs, Academic Affairs, Continuing Education, etc.) devoted to global issues could be identified and long-term plans for enhancing the University's status as a leading international university would be created. In addition, short-term projects would begin, existing ones would be coordinated, and the resources necessary to fund international research, teaching, and service on a larger scale would be identified.

Research: Enhancing the research experience for undergraduates is important for everyone in the University community. UNC's growth in extramural research funding is a valuable asset that might be drawn upon to provide additional opportunities to undergraduates whose strong pre-college preparation makes them eager for research opportunities and interaction with faculty, graduate students, and professional staff. Increasing the number of students involved in basic and applied research, with departmental honors programs, and who are attending and making presentations at national meetings are significant goals. The proposed programs would ensure that undergraduates are welcomed into the communities of performance, scholarship and research that comprise our campus, that our students learn to make creative contributions to these disciplines, and that our graduates are well prepared to face future unsolved problems with confidence and enthusiasm.

Appendix B: Initial QEP Presentation to the Faculty Council (February 2004)

Selecting a Quality Enhancement Plan (QEP) for The Southern Association of Colleges and Schools Re-accreditation

Executive Associate Provost Bernadette Gray-Little.

As many of you know, every 10 years the University as an institution is reviewed by a regional accrediting body (SACS) for re-accreditation. There are many legal and financial implications of accreditation that make this voluntary process necessary. Moreover, the re-accreditation process, in particular the self-study preparation, can have long-term beneficial effects. In the 1985 accreditation, led by Jack Kasarda, we focused on the University as a research university. I believe this process raised our consciousness regarding the research mission and laid the groundwork for a clear focus on enhancing our research status. The 1995 re-accreditation, led by Darryl Gless, focused on excellence in undergraduate education. It was not accidental that this report was soon followed by the task force on intellectual climate, which led to several new initiatives to strengthen our undergraduate programs.

The structure of the re-accreditation process has been changed during the past two years. For example, SACS has attempted to move away from a re-accreditation process led by a single grandmaster and has, instead, called for development of a leadership team. Our leadership team consists of Chancellor Moeser, Provost Shelton, Vice Chancellor Nancy Suttentfield, Dr. Lynn Williford, Professors Kerry Kilpatrick, Bob Alder, Bobbi Owen, Mark Peifer, and myself.

I am here today as a representative of the leadership team to ask for your guidance about a key element of the self-study process.

There are two major components of the re-accreditation self-study. One is a series of reports that respond to specific questions raised by SACS. There are approximately 70 such reports that will range in length from 1 page to 20 or 30 pages. These reports mostly ask how we address certain processes, how we evaluate them, and how we incorporate the results of our evaluation into planning for greater effectiveness. Groups composed of member of the faculty, staff and administration, and student body will be formed into groups to address these issues. Many of you will be asked to participate.

The second component, and the reason I am here today, is the quality enhancement plan, QEP. The QEP describes a carefully designed and focused course of action that addresses a well -- defined topic of (issues) related to student learning. This is the forward-looking part of the re-accreditation. It should describe an area of importance for us, something to which we need to have an ongoing commitment. The QEP should be associated with ongoing planning efforts. At its best the QEP would have a transforming effect on student learning.

SACS Criteria for Selecting a QEP topic

- Addresses an issue related to student learning
- Addresses a critical, strategic issue; integrating with ongoing planning process
- Addresses an issue discovered through assessment; integrated with ongoing assessment process
- Engages the wider academic community
- Capacity to implement
- Executive commitment for 5+ years

Illustrative examples from SACS

- Enhancing academic climate for student learning
- Strengthening general studies curriculum
- Developing creative approaches to experiential learning
- Enhancing critical thinking skills
- Introducing innovative teaching and learning strategies
- Increasing student engagement in learning
- Exploring imaginative ways to use technology in curriculum (NC Stare Learning in a technology rich environment)

These examples are mostly focused on undergraduate learning issues, but not exclusively. Our QEP does not need to be limited to undergraduate student learning, but should include it.

Suggestions from UNC-Chapel Hill groups

Chancellor's Advisory committee, Executive Committee of the Faculty Council, Deans' Council, (discussions with graduate and undergraduate student groups and the employees forum are scheduled)

- **Making Connections:** This topic uses the title of the proposal for the undergraduate curriculum revision, but includes more. It includes connection across the curriculum, interdisciplinary efforts among faculty to enhance learning and research, and ways in which connections with communities (local, national, and international) can enhance student learning.
- **Explicit focus on Internationalization:** This would include many of the activities and functions embedded in the responsibilities of the associate provost for international affairs, for example.
 - Helping to create a long-term plan for making the University a leading international university.
 - Generating resources to fund international research, teaching, and service.
 - Identifying ways and means for providing resources for international programs.
 - Facilitating the coordination of international activities across campus.

- **Innovative Teaching and Learning Strategies:** A QEP focus on innovative teaching would invite an evaluation of teaching and learning strategies throughout all disciplines and levels of instruction with a focus on innovation and effectiveness.
- **Honor and Integrity:** This topic would be a follow up to and expansion of the excellent set of discussions and activities associated with the honor and integrity initiative, including the influence honor and integrity has on the teaching and learning process.
- **Implementing and evaluating the General Education curriculum:** We are already engaged in this process. However, our QEP could focus on this very ambitious project with a commitment to study the effects of the new curriculum and to incorporate the findings into continuous improvement of the new curriculum.
- **Developing Undergraduate Research Programs:** Our office of undergraduate research is just about five years old. However, it has already had an important role in cataloguing, celebrating, and raising the profile of undergraduate research in a way that highlights the important work of the faculty and graduate students across the campus. A QEP devoted to this topic this work would make undergraduate research a major focus of university commitment.
- **Nurturing Arts across the curriculum:** The development of the arts corridor, Renovation of Memorial Hall, increased use of the Ackland as resource in teaching by many disciplines, the time may be ideal to ask how Arts might be emphasized in student learning and what are the benefits?
- **Develop a plan to assess growth in student learning over time:** This topic would include a careful assessment of how students learn and what they learn during their time at Carolina and would attempt to determine the Value Added by a Carolina Education.
- **Carolina as an entrepreneurial learning environment:** We were recently awarded a Kauffman grant to facilitate entrepreneurship in teaching, research, and public engagement; we are developing Carolina North; an increasing number of our faculty are involved in research, evaluation, or teaching efforts that have potential for commercial development, at the same time that they contribute to social and economic wellbeing of the region. A QEP on entrepreneurship would both refine and expand these efforts.
- **Assess Impact of University's contributions on state and society:** We often focus on the fact that we are a "public" university. To most of us this means something other than the fact that we receive financial support from the state, it also implies obligation. How does the University contribute to the state and society? A QEP on this topic would attempt to gauge the tangible and intangible contributions that the University makes through its teaching, research, and public engagement.

Appendix C: Informal Ballot of QEP Choices (February 2004)

Faculty Council February 13, 2004

SACS Quality Improvement Plan Topics

We invite you to rank the following suggestions from the SACS QEP program, and to suggest other topics.

In the space provided, rank your top five choices on a scale of 1 to 5, assigning "1" for your top choice. You may add to the list.

- A. Making Connections
- B. Explicit focus on internationalization
- C. Innovative Teaching and Learning Strategies
- D. Honor and Integrity
- E. Implementing and evaluating the General Education curriculum
- F. Developing Undergraduate Research Programs
- G. Nurturing Arts across the curriculum
- H. Develop a plan to assess growth in student learning over time
- I. Carolina as an entrepreneurial learning environment
- J. Assess Impact of University's contributions on state and society
- K. (describe briefly) _____

Appendix D: Faculty Involvement in Undergraduate Research, College of Arts and Sciences, 2004-2005

	DEPARTMENT	N	# mentors	% mentors	# projects	# theses	# meetings	# publications
A	Art	15	9	60	25	11	10	0
A	Dramatic Art	24	11	46	42	2	7	0
A	Music	27	16	59	33	12	17	0
H	American Studies	7	3	43	9	2	2	0
H	Classics	11	3	27	20	2	0	0
H	Communication Studies	14	8	57	21	0	1	3
H	Comparative Literature	4	1	25	2	0	0	0
H	English	43	21	49	17	47	8	0
H	Germanic Languages	9	2	22	1	2	0	0
H	Linguistics	7	1	14	0	1	0	0
H	Philosophy	20	10	50	23	5	1	0
H	Religious Studies	9	6	67	18	3	1	0
H	Romance Languages	44	17	39	42	12	2	0
H	Slavic Languages	7	4	57	27	3	0	0
H	Women's Studies	5	3	60	4	1	0	2
NS	Applied and Materials Sciences	1	1	100	1	0	0	0
NS	Biology	45	38	84	95	17	12	16
NS	Chemistry	42	23	55	48	17	5	14
NS	Computer Science	31	10	32	27	3	11	5
NS	Exercise and Sport Science	13	4	31	6	1	0	4
NS	Geological Sciences	11	5	45	6	1	0	2
NS	Marine Sciences	17	9	53	22	2	3	3
NS	Mathematics	35	7	20	25	4	3	2
NS	Physics and Astronomy	32	18	56	59	3	12	44
NS	Psychology	49	23	47	112	19	6	9
NS	Statistics	15	1	7	1	1	0	2
SS	African and Afro-American Studies	15	10	67	107	4	1	0
SS	Anthropology	24	17	71	22	12	2	1
SS	Asian Studies	18	5	28	4	1	1	0
SS	City and Regional Planning	13	2	15	5	1	0	1
SS	Economics	26	10	38	1	23	1	2
SS	European Studies	1	1	100	1	1	0	0
SS	Geography	16	11	69	29	8	2	0
SS	History	40	20	50	35	31	4	0
SS	International Studies	1	1	100	4	1	0	0
SS	Latin American Studies	2	1	50	0	1	1	0
SS	Peace War and Defense	1	1	100	0	1	1	0
SS	Political Science	31	23	74	53	33	3	0
SS	Public Policy	10	7	70	13	12	1	5
SS	Slavic, Eurasian & East European Studies	1	1	100	0	3	0	0
SS	Sociology	21	11	52	15	9	1	3
	Total:	742	375	51	975	312	119	118
	# Depts involved	41	41	100%	37	38	27	17

Abbreviations used in Appendix D: Faculty Involvement in Undergraduate Research, College of Arts and Sciences, 2004-2005

A	Fine Arts
H	Humanities
NS	Natural Sciences
SS	Social Sciences
N	Number of faculty submitting an Annual Report
# mentors	Number of faculty who supervised one or more undergraduate research projects
% mentors	The percentage of faculty in that department who mentored one or more undergraduates
# projects	The number of students supervised by faculty in that department (excluding thesis students)
# theses	The number of theses written by undergraduates in that department
# meetings	The number of presentations given by undergraduates at professional meetings and the number of performances given off-campus
# publications	The number of undergraduates who co-authored publications

Appendix E: Maymesters and Short Sessions at Other Institutions

Maymesters (and other short sessions) are rapidly growing in popularity at institutions of higher learning in North America. Many other universities offer Maymesters, including Clemson University, Cornell University, the University of Indiana, Rice University, Syracuse University, the University of California at San Diego, the University of Colorado, the University of Connecticut, the University of Illinois, the University of Iowa, the University of Maine, the University of Maryland, the University of Minnesota, the University of Mississippi, the University of Nebraska, the University of Nevada, the University of Oregon, the University of Virginia, the University of Wisconsin, Vanderbilt University, and Washington University. Some schools have winter intersessions (Cornell, Rutgers, Connecticut, Iowa, Maryland, Mississippi, and Virginia) and a few late summer intersessions (UC-San Diego and Oregon). These intersessions vary from one week to four weeks, typically offering three-credit hour courses. While the committee has judged that a January intersession would be unfeasible for the University, they have been included in this best practices survey.

University of Virginia

The University of Virginia began a two-week January term in 2005. It offers new courses, research, and study-abroad opportunities. The intensive format encourages extensive student-faculty contact, allowing students and faculty to immerse themselves in the topic at hand. Fourteen courses were offered, two of which (*Renaissance Art on Site* and *The Cinema in Spain*) are study abroad. One other, *Exploring Chaco Canyon and the Pueblo Past*, took place in New Mexico. On-campus courses include *Unearthing the Past; Theatre Art - Image to Form; Film Noir and its Backgrounds; Remote Sensing; An Introduction to Global Health - Theory and Research Methods; Beyond the Second Year - Academic Realities and Skills; Virginia Government and Politics; Post-Soviet Political Challenges - Nationalism, Ethnic Conflict, Chechnya; Nation-Building in Iraq - Past, Present, Future; Understanding Diversity in the Modern University - Research, Policy, Climate; and Qualitative Methods and Field Research*. Classes meet four hours per day, five days a week. Two hundred sixty-four students and twenty-one faculty participated in the pilot. Four of the courses were team taught.

Reports from Karen Ryan, Associate Dean of the Arts, Humanities, and Social Sciences at Virginia, and Dudley Doane, Director of the Office of the Summer Session and the Center for American English Language and Culture, indicate that the pilot session attracted top faculty and outstanding students, offering courses that were new and innovative, without the loss of a summer or semester for research. Student evaluations indicated that the pilot was a great success, with 100% saying it should be continued. The session was particularly popular with fourth-year students. There were more applications from faculty than could be funded, with 11 study-abroad applications alone for next year.

Colorado College

Colorado College began an unusual Block Plan program in 1970. It divides the academic year into eight three-and-a-half week segments or blocks, with students taking one course at a time.

Some courses may last for one block, others for two or three blocks, depending on the nature of the material. Their report follows.

“This schedule has many advantages. All courses are given equal importance, and students can give full attention to each course. Classes are kept small; the average size is 16 students, and almost all are limited to 25. Formal lectures are rare, and seminar discussions and active laboratories are the norm. The concentrated format and small classes are carefully designed with one vital educational principle in mind: at Colorado College the student is an active participant instead of a passive recipient in learning.

The Block Plan offers the advantage of flexibility. Each class is assigned a room, reserved exclusively for its faculty and students, who are free to set their own meeting times and to use the room for informal study or discussions after class. Since competing obligations are few, time can be structured in whatever way is best suited to the material. No bells ring. Nothing arbitrarily intrudes after 50 minutes to cut off discussion. An archaeology class can be held at the site of a dig in southeastern Colorado for one block, followed by a second block for laboratory analysis. A biology class might have a week of classroom orientation, then go to the field for two weeks. An English class can spend one morning reading a Shakespeare play out loud and the next morning discussing it or getting together with an acting class to try a few scenes.

Students may use a block to develop independent projects of their own which sometimes may be pursued off-campus. Such projects are often funded by the college's Venture Grants.

Although students compile their own programs and no two schedules are likely to be identical, most students spend several hours a day in class, usually in the morning, and then additional hours studying. Students should expect to spend several hours studying for every hour spent in class.

Courses taught under the Block Plan are designed to cover as much of a subject as a course in a conventional semester or quarter. One unit of credit is equal to four semester hours.

Advanced students or those who seek additional academic challenges may add semester or year-long extended format courses, often involving independent research. An additional academic opportunity is the half-block offered to students in January. Students may take afternoon adjunct courses in activities such as maintaining fluency in a foreign language, playing a musical instrument, or other subjects requiring application over an extended period of time.

The intensity of the Block Plan is complemented by the college's Leisure Program which offers students opportunities to participate in athletics, crafts, social action programs, musical and dramatic activities.

Each block ends at noon on the fourth Wednesday, giving students four-and-a-half day mini-vacations called “block breaks.” Some students relax by staying on the campus; others participate in college-sponsored recreational activities such as bicycle trips to Aspen, raft expeditions down the Colorado River, or volcano climbs in Mexico.”

University of Colorado at Boulder

Colorado has offered a Maymester program since summer 2000. It is a three-week program with classes meeting five days per week for three hours each day. Students can take only one course in the session. Demand from both students and faculty for Maymester courses was higher than expected, with twice as many senior faculty teaching in the Maymester as there are in the traditional summer session. Over 75 proposals were received and 50 classes were offered. A total of 1089 students were enrolled, 75% of them juniors or seniors. An all-day workshop was offered to help faculty learn more about the intensive format.

We have received and reviewed evaluations from the initial program. Overall, both students and faculty found it a rewarding academic experience. “Students like concentrating on one class, the sense of community that develops in the classroom, and the opportunity to complete one class in three weeks. Faculty like the longer teaching blocks, the intensity and energy that develop in the classroom, and the focused nature of the term.” Students are told to expect an additional three to five hours of work outside of class and did have to learn to adjust to the intensive workload.

Sample courses include *Women’s Spirituality and Art*, *Looking at Dance*, *The Natural History of the Colorado Plateau*, an interdisciplinary survey of the history of Japan, and a course designed to integrate theory with required community service. In addition, Colorado offers a graduate internship, “*Humanities in the Parks*,” during which students attend a Maymester course entitled “*Public Humanities*,” taught in conjunction with National Park Service personnel. Mornings are spent in lecture and discussion of various subjects in the environmental humanities, and on how to effectively communicate the insights and perspectives of the humanities to a national park audience. In the afternoons interns work on the specific projects that will be part of their individual internship.

Purdue University

Purdue’s three-week Maymester began in 2002. Students can choose their class to match their interests, with courses such as Russia in transition; tropical agriculture in Brazil; animal agriculture in Poland; organic and sustainable agriculture in England, Wales, and the Netherlands; and sustainable use of natural resources in Sweden. In 2004, Maymester courses took students to Brazil, China, Cuba, Costa Rica, and the United Kingdom. An interdisciplinary study-abroad Maymester program offered an in-depth introduction to the economic, social, cultural, and political changes emerging in contemporary Russia. An interdisciplinary, four-week, study-abroad course, *In the English Landscape*, acquaints students with the ways that human culture and natural environments intersect to create landscapes. *Experiencing Cuba* is a three-hour interdisciplinary course on Cuba (including three weeks on site). *Science, Medicine, & Magic in the Ancient West* is another interdisciplinary offering.

University of Georgia

The University of Georgia has a well-established Maymester program, offering a large variety of experiences on campus, off campus, and abroad, a few of which are high-lighted below.

- *Institute of Ecology Maymester Session*: an interdisciplinary experience offered jointly by the university and Ecolodge San Luis and Biological Station.
- Maymester Session on Ossabaw Island, *The Science and Art of Barrier Island Conservation*: an interdisciplinary field course at The Ossabaw Island Natural Heritage Preserve near Savannah, Georgia.
- Maymester Session on Skidaway Island, *Ecosystem Complexity In the Marine Environment*: students conduct research with some of the top scientists in the fields of ecology and marine science.
- Creative Writing Program: *Maymester Writers' Institute*
- *The Maymester Art and Culture of Cuba Studies Abroad Program*: students experiencing and reflecting upon the art, nature, and culture of Cuba.

Virginia Tech

Virginia Tech offered a service-learning experience for the first time in a Maymester program in 1999. Upper-level fisheries science majors took an interdisciplinary environmental problem solving course that was complemented by a group service-learning project. Virginia Cooperative Extension agents provided the contacts with landowners having pond management problems.

University of Miami

The University of Miami's Saltwater Semester was highlighted in the *Chronicle of Higher Education* in 1998. It is a program that immerses students in the marine sciences in a group of courses from several disciplines, all related to the sea. Miami has been experimenting with such focused learning communities for over ten years. With money from federal and private grants, it has developed over 30 such programs. It was part of a national learning community development and dissemination project run by The Washington Center for Collaborative Teaching and Learning.

Appendix F: Submester and Integrated Cluster Models

“Submesters” and “integrative clusters” are block scheduling systems that could be incorporated into a traditional fall or spring academic semester. They do not depend on an intersession or summer schedule (as would the Maymester) but provide additional variations within a standard term. At UNC-Chapel Hill, undergraduate programs in the professional schools (notably the Kenan-Flagler School of Business) and graduate programs in the schools of Public Health and Medicine have successfully used similar models for some classes.

Submester Model

The Submester model is similar to the block plan adopted by Colorado College in 1970. It does not seem to have been implemented at a Research I institution with an undergraduate student population as large as UNC-Chapel Hill. Under the Submester model, courses would be offered within a regular semester.

A Submester would be comprised of three four-week intensive courses, offered sequentially within each spring semester. To ensure equivalency with regular courses, each Submester course would be worth 5 credit hours earned through 3 contact hours per day for five days per week. The first Submester course would start at the beginning of the regular spring semester. The second Submester course would end just before the regular spring break, allowing a short intersession break for students between the first and second Submester courses. The third Submester course would begin immediately after spring break and finish before the end of the regular semester.

Submester courses would be available only in the spring semester and be targeted toward juniors. The new curriculum’s integrative option is designed for third-year students, and concentrating this approach in one semester rather than two would limit the advising and administrative burdens of tracking and managing this innovative structure at the scale that could be expected to develop at UNC-Chapel Hill.

New regulations would be necessary to maximize the benefits of the Submester approach while avoiding external logistical limitations and requirements. First, students would not be allowed to enroll in any other courses during the semester. This would ensure a focused, intensive learning experience and provide flexibility for instructors. Second, students would have to sign up for a full set of three Submester courses in the spring semester. This would address minimum credit hour requirements associated with student loans, progress-to-degree, and related enrollment demands to qualify students as full-time. Third, the Submester offerings would be available only to students in their third year of enrollment. This would meet the new curriculum’s goals and minimize the impact of this structure on students’ progress toward meeting degree requirements. Fourth, drop/add and pass/fail options would not be available to students choosing the Submester approach. Because Submester courses would track differently than regular courses, drop/add time conditions would occur very quickly, and could be met in any case only by switching to another Submester course. Because of the nature of Submester courses, the committee saw them as closer in spirit to courses that do not allow the pass/fail option, such as Summer School courses, Honors courses, and First-Year Seminars.

The Submester approach has many advantages for accomplishing the integrative learning goals of the new curriculum. Students in Submester courses would not be taking any other courses concurrently. In addition to more focused learning, this would offer great opportunities for incorporating experiential and off-campus learning into course design. Students enrolled in Submester courses would continue to be part of the campus community (unless away on a special field experience) and thus would be able to take advantage of out-of-class learning experiences that are part of the students experience at the University. Students would be enrolled in full fifteen-hour loads at no additional cost and finish coursework and exams by mid-April. Because of the extra demands on faculty teaching a Submester course, one five-credit Submester course should be considered equivalent in teaching load to two three-credit courses. Not only would this allow faculty greater flexibility in the design and execution of effective learning experiences, but the concentration of teaching responsibilities would provide more concentrated time for scholarly research and teaching preparations.

The committee noted that the unusual structure of the Submester model makes it difficult to anticipate potential disadvantages without wider discussions with the entire University community. Among the several challenges that the committee identified as needing resolution were: (1) the possible effect of Submester teaching assignments on chairs' flexibility as they simultaneously seek to meet major and graduate program needs along with those of the new curriculum; (2) the difficulty that B.S. students would have in taking advantage of the Submester approach; and (3) the fact that the required nine-hour integrative option of the curriculum is less than the 15 hours necessary through the Submester approach. We believe that each of these challenges can be addressed, but acknowledges that the Submester approach should be tested in pilot fashion before being implemented.

To meet the Submester scheduling requirements, the spring semester calendar must be structured so there are no fewer than forty-two class days between the first day of classes and the last class day before spring break.

Integrated Cluster Model

Implementation of the integrated cluster model would require more coordination and support than either the Maymester or Submester options; nevertheless, the committee saw it as carrying the greatest promise of a fully integrative learning experience for UNC-Chapel Hill students.

An Integrated Cluster would be comprised of three independent but integrated five-credit courses offered in a semester. The three courses would be designed to address a large topic (e.g., landscape, energy, justice, technology) from three different disciplinary perspectives. The topical coverage, issues addressed and course requirements such as readings, assignments, and exams would be coordinated in advance among the instructors through thorough discussion and careful planning. Additional coordination among the instructors would be necessary throughout the semester to ensure that the goals for integrative learning are accomplished.

Each course would have 250 in-class contact minutes per week. Some courses might meet every day for 50 minutes, perhaps, but the committee expected that most would meet less often with suitably longer classes. Students would be required to enroll in all three Integrated Cluster courses but only those courses. Unlike the Submester, the cluster of parallel, integrated within-

semester courses could be available in either the fall or spring semester, but we believe that the Integrated Cluster option should be available only in a student's third year.

Because the course structures would be planned and coordinated in advance and because students would not be enrolled in other courses, experiential learning opportunities and field trips (possibly with all three instructors) would be possible with the Integrated Cluster model. As with the Submester model, drop/add and pass/fail options would generally not be available to students choosing the Integrated Cluster approach.