

# Undergraduate Assessment at North Carolina State University: A Collaborative Effort

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North Carolina State University is a land-grant institution long defined by the individual identities of its Colleges and administrative units. Such a de-centered institutional environment has, in the past, worked against strong university-wide assessment efforts. In the last decade, however, we have made great strides in assessment, in part by taking advantage of decentralization as an opportunity for effective program assessment and in part by taking advantage of faculty initiatives that cut across institutional boundaries for the improvement of undergraduate education. Two examples of these faculty initiatives illustrate this institutional change.

A recent informal faculty meeting regarding [Inquiry-Guided Learning](#) assessment, brought together faculty representatives from Forestry to Microbiology to History to Multi-Disciplinary Studies, all coming together in evening hours to discuss how to improve student learning and faculty development--discussing how evidence can transform an institution. At several [Council on Undergraduate Education meetings](#), faculty members demonstrate their commitment to improving general education through course-based assessment. Such discussions represent the strong feelings of faculty throughout various disciplines about the curriculum, as well as lively discussions about the role that co-curricular programs should play. The commitment to conversation, negotiations, and action remains.

These examples demonstrate the intensity, power, and variety of the collaborations across the campus, the variety and flexibility with which undergraduate assessment is approached at North Carolina State University. Indeed, it is the growing commitment to assessment among faculty that is creating an environment that is hospitable to university-wide assessment. Of course, challenges remain. But the progress we've made is becoming institutionalized at many levels of the university, paving the way toward continuous, meaningful improvement of undergraduate education at NC State.

This report summarizes key points of the process, our victories as well as our challenges. Links to detailed information are embedded in the text. (In some cases, passwords are necessary for accessing the information; we can provide the passwords.)

## History

Ephraim Schechter, University Director of Assessment, has described the history of assessment at North Carolina State University as having “focused on assessing student learning outcomes in undergraduate education for many years. This focus includes several parallel developments:

- Special projects such as the establishment of First-Year College and the Campus Writing and Speaking Program, curriculum renewal projects that stress inquiry-guided learning, experiments with computer-assisted teaching, and academic support projects within the [Division of Undergraduate Affairs](#) that include formal assessment of their programs’ impacts on student learning.
- Some [individual baccalaureate-granting programs](#) have maintained and expanded student learning assessment as part of institutional effectiveness activities from earlier cycles of SACS reaffirmation. Major effort has gone into developing and supporting assessment of student learning outcomes for campus-wide undergraduate program review, in the College of Engineering’s preparation for ABET program-accreditation reviews, and, most recently, as part of revitalizing the University’s undergraduate general education requirements.
- A wide range of support has been developed for colleges’ and academic departments’ assessment activities. This support includes the provision of data from regularly-scheduled campus-wide surveys of second-semester sophomores, graduating seniors, and baccalaureate alumni; student [demographics and performance measures](#) such as enrollments and graduation rates; extensive information about assessment; and training and consultation.

The collective evolution and impact of these developments gives NC State a well-established climate for outcomes assessment in undergraduate education that is a major part of the university’s “bottom-up” approach to outcomes-based assessment.”

## Philosophy

Because of our rich [history](#) of institutional effectiveness and data-driven decision-making, we have learned that procedures that work well with the assessment of some programs and courses do not work well with others. The main lesson from this history is that faculty and co-curricular experts know best about their programs and they know best how to get at the evidence that would demonstrate their programs’ strengths and weaknesses and thus, how to improve them. While the assessment process varies among course-based, general education, and undergraduate academic program review, the pervading philosophy of all the varied approaches is similar. Jon Rust, Professor of Textile Engineering and former chair of the [Committee on Undergraduate Program Review \(CUPR\)](#), describes that philosophy in his memo to the SACS Institutional Effectiveness Committee:

We are a team of faculty (with some administrative support) that is working to dramatically improve undergraduate education at NC State University by making ourselves accountable through regular, continuous, and on-going assessment of our academic programs and the abilities of our students. We are a team of faculty that is striving to make this transformation occur while being sensitive to accreditation needs of individual programs, tailoring it to be no more burdensome than what is necessary in order for the process to be effective, maintaining a commitment to making the process meaningful, and carefully respecting disciplinary autonomy. The success of program assessment depends on faculty. And it is because of CUPR’s faculty driven approach and the buy-in from colleagues across the campus that the process is working

here at NC State University and why we have no peers among Research I universities throughout the United States in the area of assessment of undergraduate academic programs.

Chris Anson, Professor of English and Director of the Campus Writing and Speaking Program states in his [conceptual understanding essay](#) that “This time, the assessment is about us -- about our own courses, our own curricula, our own standards of excellence within our departments, created on our own terms, on our own time, for our own reasons. Accreditors may be requiring it-how else to be sure it happens? -- But ‘it’ is shaped from our own needs as faculty and administrators trying to create the best undergraduate programs we can. The administration is saying, ‘We want you to evaluate yourselves in ways that go beyond a simple reliance on student grades, course evaluations, and core requirements for majors. We hope you'll ask yourselves how you know you're teaching well, what evidence you can find that demonstrates not only your successes at preparing students but your shortcomings. But we want you to decide what's meaningful to you, and what methods or instruments make the most sense to you as you find out how you're doing. We want you to choose the best practices to improve those areas you identify as needing attention.’ Such a message reflects a paradigm shift that's been developing over the past decade in the way that institutions engage in program review and assessment.”

And finally, James Anderson, Professor of Counselor Education and Vice Provost of Undergraduate Affairs gives the reasons for this approach in his [article](#) about the process of assessment-based undergraduate program review: integrity, professional and public accountability, and a commitment to students and their learning. He points out that NC State wanted to add meaning to its claims of quality and effectiveness, to establish its own definition of a premier Research I institution, and to provide more reliable information to decision-makers whether they are engaged in planning, allocating resources, or other forms of support for the University. Most significant is the role of a full-campus dialogue, leading to greater cohesion and a more united commitment to undergraduate education from every area of the institution.

### **The Balance of Process and Evidence**

Of course, process is nothing without resulting evidence. And evidence cannot have a meaningful impact on educational decision making if a process is forced on decision makers.

Effective assessment demands an effective balance between process and evidence.

The [expectation of engagement](#) in this process is clear. Meaningful reflection and evidence of sound critical judgment on the part of the faculty and administration are part of our charge as stewards of the institution and promoters of our institutional culture. Just as our land-grant mission requires us to attend in a culture of accountability to the educational needs of our state's citizens, assessment-based reviews help us attend to evidence of our impact. Accountability is an institutional value. We provide the evidence of that culture in the work we document for [our regional accreditation body](#) for the whole university (SACS), for program accreditations such as [ABET](#), and for our own [compact planning process](#) that drives all discussions regarding new resources and also requires assessment-based evidence of impact and effectiveness.

It is especially important to stress that this work is best represented where faculty on this campus are wholeheartedly embracing this process as “what education is about” and where the faculty are vigorously engaged in the process because they value what they are learning about their students and their curriculum. The [Frequently Asked Questions](#) on the Undergraduate Academic Program Review (UAPR) website are representative of many of the faculty's concerns, but the responses from their peers and colleagues and friends across campus are equally representative of the kinds of values that the faculty who are participating in this process share about the work. In a further effort to illustrate the delicate balance of evidence and process, each major area is summarized below. For each area, we focus on student learning, faculty development, and institutional transformation.

### **Undergraduate Academic Program Review (UAPR)**

[Undergraduate Academic Program Review](#) is a systematic and well-organized process, intended to promote meaningful and manageable assessment of [academic programs](#), [undergraduate affairs administrative programs](#), [general education](#), and courses.

The wealth of information about how the UAPR process works and the evidence that it is working can be found at its [website](#). The site provides a detailed description of the process used to

assess undergraduate programs and academic support services as well as evidence of how this process of assessment has become part of the NC State culture. In addition, the website illustrates CUPR's [educational approach](#) to ensuring its effectiveness.

Support and resources for the process have been as varied as the process itself. Several [Frequently Asked Questions](#) composed by faculty to provide quick but comprehensive answers to the most common UAPR questions can be found online in addition to such [resources](#) as a comprehensive [toolkit](#) (which includes excerpts from the Ephraim Schechter's nationally known [online assessment website](#)), [financial support](#), [workshops and conferences](#) used in training, [UAPR facilitators](#), and [documentation](#) assistance. For those interested in publishing their assessment work (a valuable means for getting faculty more engaged in the work), information on a variety of journals can be found on the [Publishing Opportunities](#) page. If additional funds are needed to pursue assessment, grant information can be located on the [Grant Opportunities](#) page. Finally, when users are looking for more information, they can either [contact us](#) or look for additional assessment related information on the [Useful Links](#) page.

In determining how well this process is working, we chose the [characteristics](#) that assessment experts such as Peggy Maki, Cecilia Lopez, Trudy Banta, and Peter Ewell espouse as imperative to the promotion of continuous and systematic assessment. It is important, however, to understand the nature of the various educational programs so that we can best determine what will be helpful in raising awareness of those characteristics that are appropriate to particular programs. This awareness provides those programs with the opportunity to discuss how to solve immediate difficulties before engaging in their next steps.

In keeping with the spirit of genuine assessment, our colleges have programs that vary in the implementation of their [processes](#) and in the sophistication of the documentation of what they have learned from their evidence of student learning and development. Some of the programs choose to share their assessment plans and results [publicly](#) on the website; others, do not. Since many of the programs do not desire to share their assessment results publicly, examples of each program's evidence can be found in the [database](#) that generates the [UGA Assessment Impact Report](#). Those with administrative privileges may drill down into the depths of the database and see examples of assessment plans and decisions based on the evidence gathered.

The fact that programs are in various places in their assessment initiatives results in the need to apply varying solutions to programs' processes. For example, the [Department of Foreign Languages and Literatures](#) has made their process completely transparent and faculty of all levels are involved in various ways. Microbiology also has their faculty involved and their process has been very reflective and thorough, but documentation continues to cause frustration, because it is so time-consuming. Faculty in the Department of Curriculum and Instruction and the Department of Math, Science, and Technology Education (College of Education) are initiating a new performance-based assessment system to document the learning and teaching progress of student teachers. For the colleges, the [College of Engineering](#) has a very organized and sophisticated assessment process and recording of decisions-made. The [College of Design](#), while equally sophisticated and systematic in its process, uses more varied methods in its documentation. Again, attempting to holistically summarize these varying solutions requires us to be more tailored in our teaching about assessment and the use of its results.

The complexity of our documentation process is something that we continue to struggle with as an institution. In other words, if one were to observe faculty and administrative conversations, both formally and informally, one would immediately discover evidence that faculty and administrators use evidence to inform decisions to improve desired outcomes in their courses, programs, and personal and professional development. For example, the Department of Forestry has learned from industry representatives' reviews of students' work to increase training in wildlife management in both the on-campus curriculum and the forestry summer camp experience. The Department of Statistics has learned from student exit interviews, among other things, to advise students to take ST445 concurrently with ST302, thus they take it earlier in the program than previously.

The time required to stop what one is doing and "write it all down," continues to cause challenges. We continue to provide [technological solutions](#), whose use is not required, to aid in the documentation process and we continue to follow-up through Department Heads, Academic Associate Deans, and Deans with those whose assessment efforts are in need of improvement.

## General Education

Similar to many large institutions, NC State has had its [historical](#) challenge with assessing its general education program. While we have had a rich history of [survey assessment](#) and examined the [findings](#) to propose recommendations, our faculty desired a way to assess general education in a manner that would improve the general education course offerings and the program as a whole. For example, we have learned from past surveys that employers are unsatisfied with our students' ability to communicate. This finding launched the Campus Writing and Speaking Program. Through the campus writing and speaking program's work and assessment, they have recommended that the GER credit hour requirement for [English be changed](#) from 6 to 4 credit hours and that the disciplines incorporate the assessment of applied writing skills into their courses. Now, we need to better understand how these courses are impacting students' writing. Thus, we are investigating the feasibility of course-based assessment of GERs through a carefully planned [pilot study](#) being administered spring 2003, with its long-term implementation planned for spring 2004, supported by the [Division of Undergraduate Affairs](#), the [Council on Undergraduate Education](#), the [Campus Writing and Speaking Program](#), and the [Faculty Center for Teaching and Learning](#). The Faculty Center for Teaching and Learning and the Campus Writing and Speaking Program continue to be instrumental in educating faculty how to meaningfully reflect about their course design so that evidence of student learning can be captured and used to make decisions and recommendations for improvement. The following excerpt from the general education assessment site illustrates this notion: "When we think of general education at NC State, we think of the [General Education Requirements \(GERs\)](#), the extensive list of courses in different academic categories that outlines our collective sense of a general education for all students. But general education is not just a list of various required courses; it is an experience that shapes our students, offering them a wider comprehension of their lives and a solid foundation for being effective citizens and professionals in a diverse and changing world. General education is one of the key defining experiences of an education at NC State.

It is precisely because general education plays such an important role at our University that it must be [assessed](#). This imperative was clear in the original discussions that founded the present GERs and remains clear today. Assessment is critical in providing a way to determine how well the general education program is achieving its aims and also how to improve the program so that it can better meet those aims. But it is also clear that such a large program that includes so many departments represents a challenge for meaningful assessment, one that will attain both of the goals of assessing the program.

The Council for Undergraduate Education (CUE) has taken up that challenge and created a [viable plan](#) for assessing the GERs. The plan involves both the [CUE](#), which is the administrative body that oversees and is responsible for evaluating the GERs, and faculty teaching GER courses. Without the involvement of the former, the assessment would lack the necessary broad vision of the general education program as a whole. And without the involvement of the latter, the assessment would lack any meaningful way of improving the general education experience of students in GER classes.

Thus, GER assessment takes place on two levels. The CUE has created a set of general [GER objectives](#) outlining certain kinds of learning that define each of the GER academic categories. The faculty teaching GER courses will [generate learning outcomes](#) for their courses, outcomes that enable students in their classes to meet the objectives for the appropriate GER category. Faculty will then assess their courses as GER courses in terms of their students' ability to meet the GER objectives and report the findings of their assessment and any changes they will make in the course to improve students' learning.

The chief advantage of this two-pronged approach is that it provides the means of both assessing the GERs as a whole and improving individual GER courses. There are other advantages for faculty accruing from GER objectives. One is that they ensure a greater consistency across courses within a GER category; academic advisers can be sure that any course their students take in a particular category will share certain basic objectives. Another advantage is that the objectives provide the criteria faculty must use to propose a course for a GER category; previously the standards for inclusion in (or exclusion from) GER categories have been obscure.

Now, faculty know precisely what they must do on course action forms: demonstrate that their proposed courses contain learning outcomes and assessment instruments that are specifically aligned to all the GER objectives in the appropriate category. --**Mike Carter, Associate Professor of English and faculty training for the GER pilot team**

### **Course Assessment**

In addition to program assessment, undergraduate education has enjoyed a history of assessment of courses. The Faculty Center for Teaching and Learning (FCTL) has championed course-based assessment as a natural part of the teaching function and supports course-based assessment directly and indirectly in a variety of ways. Its popular five-session *Foundations in Teaching* workshop series describes a course development process based on student learning outcomes that is the underpinning of course-based assessment. In addition, various units on campus request single workshops in the series or combinations of workshops to suit their specific purposes. FCTL is currently developing a series of self-guided modules based on the series in both PowerPoint and web-based formats. The Center incorporates course planning based on outcomes as well as course-based assessment in its major initiatives, specifically inquiry-guided learning and service learning. Every fall, FCTL Associate Director Virginia Lee teaches a graduate-level course on college teaching that incorporates course-development based on learning outcomes. The Center also supports course-based assessment in individual consultations with faculty and through the work that Lee has done with the Committee on Undergraduate Program Review. The FCTL has also dedicated several issues of its quarterly publication *Emphasis*, either wholly or in part, to course-based assessment. Consequently, the Faculty Center for Teaching and Learning is a logical unit to support faculty development of course-based assessment of general education courses.

Other highlights include:

- Since the mid-1990s a number of NC State curriculum-renewal projects have [developed](#) and promoted [inquiry-guided learning](#) (IGL). All include explicit assessment of the approach's impact on student learning, including comparisons of students' self-reports in IGL and non-IGL courses, pre- and post-evaluations of specific aspects of students' critical thinking, and faculty perceptions of students' critical thinking and of changes in their own teaching methods.
- The [Campus Writing and Speaking Program](#) (CWSP) was established in the late 1990s to help academic programs implement General Education Requirements in Writing and Speaking. As part of this activity, CWSP has been actively helping undergraduate departments develop [explicit writing and speaking outcomes](#) for their disciplines and methods to assess them. These outcomes and assessments become part of the programs' overall outcomes assessment processes.
- [Service learning](#) has implemented both program and course-based assessment, as has the [ALCOA curriculum diversity project](#). Service Learning faculty members are currently refining a sophisticated assessment plan that will evaluate evidence of students' ability to reflect and connect their service experience with their discipline, the hallmark of this program.
- The [Student-Centered Activities for Large Enrollment Undergraduate Programs \(SCALE-UP\) Project](#) is an impressive program, which has been implemented at other institutions such as MIT, Alabama, and Central Florida. Their evidence of impact on student learning has been most encouraging to professors who must teach courses with large enrollment.
- [Project 25](#) and the College of Engineering's [mobile-computing](#) pilot are faculty-driven experiments in computer-assisted instruction. In 1997-98, Project 25 studied web-based versions of existing courses, evaluating the impact of web-based instruction with student and faculty surveys and with comparisons of web-based and non-web versions of some of the courses. COE's ongoing pilot studies how faculty and students can use the flexibility provided by laptop computers with wireless Internet access to enrich the classroom experience and improve learning. Assessment compares various aspects of student performance in "laptop" courses and non-laptop versions of the same courses.

- NC State University's involvement in the Pew Charitable Trusts funded Student Learning Initiative led by Alverno College is also illustrative of our continued commitment to improving undergraduate learning through assessment. We were one of two research universities among the 27 participating institutions. (Lee, V.S., 2002. Coordinating campus initiatives through a focus on student learning outcomes. In Austin Doherty, Tim Riordan & James Roth (Eds.) Student Learning: A Central Focus for Institutions of Higher Education. A Report and Collection of Institutional Practices of the Student Learning Initiative. Milwaukee, WI: Alverno College Institute). This publication describes a framework (based on student learning outcomes) that any institution of higher education can use to place student learning at the core of its mission and practice. It also includes 27 institutional practices from participating institutions. We distributed this publication to members of CUE, CUPR, and other faculty in support of our various assessment efforts.

### **Academic Support Programs**

Our longest running examples of continuous-based assessment can be found in the [academic support units](#) that reside in the Division of Undergraduate Affairs. The reason for this is that the leadership of the Division has communicated the expectation that no program shall go un-assessed. If a new initiative is presented, it must be presented with an assessment plan. If a program desires additional resource allocations, it must have the evidence to back that request. The Division's funding track record shows that programs that accomplish what they say they will be rewarded financially and with recognition for their assessment. While these primarily administrative units have only begun to gather direct evidence of student learning in the past two years, there have been noticeable gains in their thinking, as their [assessment plans](#) indicate. Furthermore, the First Year College's assessment of their [matched-courses](#) has provided direct evidence of improvement in student learning.

### **What We Have Learned**

We have learned a great deal about how to implement meaningful and manageable assessment through our attempts to institutionalize outcomes-based assessment. What we have learned may be described according to the following categories: shared purpose; collaboration across the institution; leadership/commitment from administration and faculty; rituals, practices, symbols; education, support, reward, recognition; evidence of depth and pervasiveness; and sustainability. Here is a little of what we have learned about each category. You may read on here or access the [full report](#) on-line.

### **Shared Purpose**

In regards to assessment, Maki (2002b) states that the shared purpose of assessment among faculty starts with innate intellectual curiosity about what works and moves toward making a commitment to continuous improvement. Once a shared purpose of assessment is established at an institution, participants can move forward with conversations regarding the innate interests of the faculty and their desire to improve what they do. The commitment toward continuous improvement can be seen in decisions that have an impact on the assessment process, and those commitments and decisions lead to a far different atmosphere from the compliance-oriented atmosphere, established by setting deadlines, insisting on rigid rules, and punishing those who err in an accreditation-driven process. The alternative is an atmosphere where faculty develop and grow with the assessment process, realizing the value and benefit of its continuous, iterative nature.

In shared purpose, participants also attempt to identify evidence by which faculty and administration have demonstrated the tie between outcomes and budget. At NC State, we have some faculty and administrators who tell us, *via* self-report surveys and interviews, that they have made budget decisions from assessment results. We also have college compact plans where we have evidence of budget decisions tied to deliverables. We now are attempting to gather direct evidence that budget decisions are being based on other types of assessment results. However, document analysis of meeting minutes has been challenging, as those minutes typically report

decisions that have been made on assessment results but do not necessarily divulge the details of exact dollars tied to each decision.

Shared purpose also means communicating the shared conceptual understanding of the assessment process and creating a common language, so that disciplines of all types can speak to each other about assessment and understand the adopted terminology. At NC State, faculty have developed a shared conceptual understanding document and have established a common language, which has been expanded in a Frequently Answered Questions (FAQ) document. We assess faculty's awareness, understanding, and application of these documents through a self-report survey and interviews.

Faculty on the Committee for Undergraduate Academic Program Review (CUPR) have used the Common Language further in the evaluation of assessment plans and closing the loop reports that have been submitted for review to CUPR. CUPR uses a [rubric](#), which has incorporated the Common Language at an exemplary level. The rubric helps norm the faculty's understandings for reviewing the assessment plans and closing the loop reports, furthering the shared conceptual understanding of the entire assessment process, while providing specific feedback to faculty on how to improve their assessment of student learning. Most interesting to note is the learning that has occurred as faculty engage in assessment planning. Faculty in the Mathematics Department noted that they have common outcomes for the first two years of their math curriculum, but then as students specialize in math education, applied mathematics for instance, the outcomes for those specializations change, yet some outcomes remain the same across specialization. This has had an impact on how they gather evidence of student learning for formative and summative purposes. The Department of Physical Education offers minors. They have discovered that while capturing evidence of student learning at graduation has given them some information on how to improve their programs, gathering evidence of student learning using rubrics course-by-course is proving to be much more informative.

Faculty who use this rubric and programs that have been evaluated with this rubric are asked *via* a self-report survey and interviews every other spring about the usefulness of the rubric, the ease of its use, and the value it has in achieving a shared purpose for assessment. In addition, we are comparing the level of understanding of assessment from faculty year to year through document analysis of assessment plans, results, and decisions-made. The rubric serves as the standard by which we measure assessment learning.

### **Collaboration across the Institution**

The process of Undergraduate Academic Program Review (UAPR) began among the faculty, and its support resonated primarily from the Division of Undergraduate Affairs. However, historically, the Campus Writing and Speaking Program, the Faculty Center for Teaching and Learning, the University Planning and Analysis office, and the Colleges have also supported assessment-based program review in their various ways. The current process asks that each of these programs collaborate with each other, share resources, and even make resource requests together in order to support the overall undergraduate academic program review process. In addition, assessment professionals from various colleges have been extremely valuable in moving the process forward and in providing support to others outside their colleges.

We, in Undergraduate Affairs, have seen this faculty/staff-dependent process move into the Graduate School and the Division of Student Affairs, the latter facilitated by a formal partnership between the Division of Student Affairs and the Office of Undergraduate Assessment. Faculty and administrators who have been active in the undergraduate education assessment process (both course and program) continue to assist the Graduate School and the Division of Student Affairs with successful implementation of assessment-based curricular and co-curricular program review. These people, in turn, are assisting other administrative units, such as research and extension to explore the values and practices of assessment-based program review. We are learning more about how to improve undergraduate assessment from what we are teaching others.

Self-report surveys ask faculty and administration about their perceptions of the collaborations among these various units. Administrators and faculty representing these various units have reported no conflict of interest or additional challenges in their current roles in light of the assessment assistance they have provided others.

## **Leadership/Commitment from Administration and Faculty**

Key faculty and administrative commitment to the assessment-based program review process was evident in its inception. NC State would not have the process we have now if it weren't for the dedication of years of leaders who began to create the expectation for evidence-based decision-making and those who were guided by their natural inquiries about their disciplines and its application to teaching and learning.

Evidence for this continued commitment exists now as faculty and administrators provide and support assessment workshops, volunteer their own time for one-on-one consultation inside and outside their own department, receive and provide training on evaluating assessment plans and use of results for decision-making, and present sound reasons to engage in assessment-based program review to a wide variety of constituents.

The Division of Undergraduate Affairs (UGA) continues to assess the extent to which faculty feel supported for the assessment process in their departments. The first round of this assessment revealed varying levels of awareness and support. Since the last evaluation results, we have made an effort to communicate the importance that every faculty member and administrator be aware and supportive of assessment-based program review. The Committee on Undergraduate Academic Program Review (CUPR) is waiting to see if the leadership and commitment of faculty and administration is evident in long-term rewards and sustainability, but we believe we have established a process that not only encourages those rewards and sustainability but that also has had an impact on the ways that faculty and administration go about their jobs, thus having even greater likelihood of sustainability.

Since our process is faculty dependent and administratively facilitated, CUPR is working to balance administrative leadership with faculty leadership. Through informal feedback of faculty and administrators working on the implementation of assessment, we learned that a balance was important to our campus culture and, thus, we assess the degree to which faculty truly feel that faculty and administrators equally drive the process as well as equally support and benefit from such a process.

In addition, UGA will assess the perception that administration is working on "climate control" (e.g., supplying the resources and rewards, while removing barriers to assessment) while faculty is providing the leadership, "peer pressure," and support. Again, evidence that this process works is embedded in the extent to which it is used for [making decisions for continuous improvement](#).

## **Rituals, Practices, Symbols**

When looking for the extent to which a cultural transformation has occurred, it is common to look for cultural rituals, practices, and symbols (Maki, 2002a). One ritual and practice that many institutions employ, such as Appalachian State University, are assessment days. These are days that the faculty and administration collect assessment information from students.

At NC State, we have assessment days, but they are days in which we share what we have learned and decided based on our assessment findings. Such days originated as a part of the Hewlett Foundation project in which the Faculty Center for Teaching and Learning sponsored and still sponsor one-day workshops for celebrating course-based assessment findings in inquiry-guided learning. The Campus Writing and Speaking Program has sponsored and continues to provide days of poster sessions where faculty share their assessment findings for improved speaking and writing in courses.

More recently, NC State has launched its own assessment [symposium](#) where selected faculty present successes and failures learned from both program and course-based assessment. Supported by the Provost, the Division of Undergraduate Affairs and external vendors, the Inaugural Symposium provides NC State with an opportunity to celebrate its assessment successes while teaching others about assessment. Joining the NC State "Best Practice" sessions, are assessment professionals and other Best Practice examples from across the nation and the globe. UGA looks forward to understanding how this symposium may motivate many to improve their assessment practices while providing the "accomplished" with recognition.

In addition, we have faculty who practice the ritual of annual external reviews, such as those in the College of Agriculture and Life Sciences, especially where accreditation is not required, and

respond to detailed data requests from our University Planning and Analysis office to inform their history of data-driven decisions. Other symbols of enculturation include the use of technological solutions for assessment-based program review and course-based assessment. In addition, assessment workshops are offered in the First Year College, the College of Engineering, CWSP, FCTL, UPA, and UGA each semester, as well as annual reviews of assessment plans, closing the loop reports, and assessment newsletters.

Thus far, our measurement of the extent to which we have met this indicator has been through observations of certain behaviors and “hits” on or visits to our Undergraduate Academic Program Review website. Each spring, UGA queries faculty as to what they would like to see in regards to rituals, practices, and symbols of an institution that has transformed itself through assessment.

### **Education, Support, Reward, Recognition**

It is in the areas of education, support, reward, and recognition where we have spent a great deal of our time. And in discussing this category, we acknowledge a great deal of overlap between it and the previously mentioned categories.

In the area of education, as previously mentioned, First Year College, the College of Engineering, CWSP, FCTL, UPA, and UGA have provided a variety of assessment workshops, and we all have tracked the attendance of faculty and administrators at those workshops as well as assessed the participants’ reported value of these sessions. In addition, UGA has conducted some pilot interviews to determine the extent to which faculty have been able to articulate their understanding of assessment principles.

CUPR has asked faculty for their questions about assessment-based program review, and we have had faculty answer those questions as FAQs. The questions and answers are posted on the Undergraduate Academic Program Review website and the hits to that website have been tracked as well. UGA continues to assess the self-reported value of these FAQs.

The Committee on Undergraduate Academic Program Review (CUPR) and other chosen Undergraduate Academic Program Review (UAPR) facilitators (e.g., faculty and administrators who are “on call” to assist anyone anytime with any part of their assessment process), as well as some of the Colleges (i.e., Engineering, Design, Textiles, Education, Humanities and Social Sciences) have undergone [annual training](#), and we are about to embark on a series of training in assessment for two other extremely important committees: the Council on Undergraduate Education (CUE), which is responsible for the assessment of general education and the Undergraduate Courses and Curriculum Committee (UCCC), which has historically been responsible for the assessment of courses. After each UAPR sponsored training retreat, CUPR and the UAPR facilitators have been given an opportunity to evaluate their own learning experience. Each time, adjustments are made for their next training session and on-going support. In addition, UGA is assessing the degree to which the CUPR members and UAPR facilitators have increased others’ understandings of assessment.

As mentioned previously, the conceptual understanding document and common language document have been extremely valuable to the education of both faculty and administrators. UGA now needs to assess the extent to which those documents’ contents are understood and used by faculty and administrators.

The Provost’s Office has supplied matching grants to colleges for use in securing external reviewers as well as funding for assessment technologies, such as TracDat, and for retreats for key faculty and course release time for faculty leaders. In addition, a SAS reporting solution for TracDat has been developed through a generous grant from SAS, Inc. Furthermore, the College of Engineering has invested time and money in developing their websites and assessment databases, as has the University Planning and Analysis office. Other colleges, such as Design and Education and some departments such as Mathematics and the Foreign Languages and Literatures continue to work on the development of their assessment websites. While UGA has tracked the extent to which these electronic solutions are used by our faculty, we have not yet formally assessed the extent to which faculty find these tools beneficial to their understanding, implementation, and documentation of the assessment process. We will conduct this assessment in Spring 2003.

On-line resources have been developed as well. At NC State, Dr. Ephraim Schechter, University Director of Assessment in University Planning and Analysis, has taken the wealth of information

from his assessment resource website and organized it into a template that our faculty have found useful. UGA is continuing to assess the degree to which faculty use the variety of online resources available to them and the extent to which these tools assist them in their assessment process.

While our ability to demonstrate, *via* the web, the extent to which we have made decisions based on assessment results remains elusive, CUPR continues to encourage faculty to publicly share what they are doing and learning through assessment. Informal feedback from faculty who are engaged in assessment but are unwilling to share with others what they are learning has indicated to us that faculty are self-conscious about their work. They recognize the assessment process is iterative and thus realize that the “products” of assessment are never complete. Such realization has caused many of them not to put their work “out there” for anyone to critique. We are hoping that over time, a body of faculty will be willing to make their work public; we believe that the compliments they get, as well as suggestions for improvement, will encourage those who are currently resistant to share their great ideas in a more public format.

UGA has conducted extensive surveys to determine faculty’s articulated needs for resources. In understanding their needs, we have worked to communicate through department heads, academic associate deans, and college deans which resources we are able to provide out of the Provost’s office and which should be provided on a program, department, or college level.

The faculty surveys have also demonstrated what CUPR needs to communicate to department and college leadership in regards to the types of rewards that faculty say they value. Rewards such as course-released time, support to organize working assessment teams, letters of recognition, release of untenured assistant professors from overly burdensome departmental assessment roles, letters of recognition of faculty assessment contributions, support to publish program assessment results, inclusion of assessment contributions in teaching and learning awards, and contributory impact on promotion and tenure appointments have been discussed and/or implemented at various levels in most departments. While the extent of the discussions has been difficult for us to track, as has the extent to which each has been implemented, our efforts to catch this evidence through self-report surveys continues.

Peggy Maki (2001) informed us in our very first training session that faculty’s ultimate reward for engaging in assessment was the improvement they would note in their own programs, a result of their assessing the extent to which [their students have learned what they, as faculty, intended their students to learn](#). The extent to which we are able to highlight the faculty’s decisions made from assessment results will provide us with confirmation that [assessment works](#). Our surveys thus far have given us testimonial statements of the value that faculty see in assessment-based program review. UGA has posted these [testimonials](#) to our website and provided some faculty with opportunities to share their success stories at several Deans’ Council meetings. Other opportunities for such celebrations and sharing are under development.

### **Evidence of Depth and Pervasiveness**

Maki (2002a) states that one of the signals of a cultural shift or change is not only that there is depth but that there is also pervasiveness of interest in assessment, through the rights and rituals, through the language, and through the conversations that occurs on a particular campus. In order to see whether this pervasiveness is occurring, one must look at the number of people and type of positions involved in the process. We have documented several people’s involvement in assessment at our institution, yet CUPR continues to struggle with knowing what the goals of involvement should be. In other words, how meaningful is a number or a percentage of participants engaged in the process? Is having 100% know about the process as important as having 80% actively engaged in it? Or is it more meaningful to illustrate this as an impact figure—that, say, 30 percent of the curriculum was shown to need modification and, to date, 45% of that modification has occurred? Our discussion of options continues as we seek to identify how best to report evidence of impact. We believe our true ability to show depth and pervasiveness will be in our ability to sustain the assessment effort over the long haul and to track its influence in various levels of decision-making.

We know that we could not be doing the type of assessment work that we have implemented had we not taken advantage of the many years of various administrative and academic departments

who have contributed to this effort and the leadership commitment from both the faculty and administration. We also have witnessed the “conversion” of historically uninvolved faculty and departments to the practice of continuous assessment. We, as previously mentioned, have even seen the process move into other parts of the University. That assessment is, indeed, having an impact is undeniable.

### **Sustainability**

Peggy Maki (2002a) states that when looking at whether there is a strong and sustainable commitment to assessment, one of the things she looks for is whether principles of commitment have been articulated either in the way that the assessment process was founded or in the way the institution is looking at it. She asks if there is a document that talks about the purpose of committing to assessment, not solely to satisfy external bodies but because there is an interest in finding out how students learn and multiple points of evidence of that interest embedded in the process. At NC State, we do have such a document and a website that describes our process, the history of the process, and the philosophy and concept behind it.

Maki (2002a) also states that she looks for the issues of what she calls the locus and the focus of the commitment. Who is actually doing this work? Who is driving it? We continue to promote and guard our assessment-based program review model as faculty-driven and faculty-dependent. Through our most recent evaluation of faculty as to whether this process is faculty-driven, we learned, as previously mentioned, that there is a delicate balance to play in regards to the leadership roles of faculty and administration. Faculty want to raise the concerns and issues, and faculty do the real work of assessment, yet they need administrative support to ensure that their work is recognized and rewarded.

Another question we ask when assessing the characteristic of sustainability is whether the process would go on if one or more of the people currently involved in assessment-based program review were to leave. Because this process arose from faculty and is increasingly embedded in faculty, we think it will be sustainable. However, because transforming a culture is a slow process, we truly won't know how sustainable this effort is until one of our key faculty or administrative leaders leaves.

We continue to learn a great deal about student learning, faculty development, and institutional transformation through this collaborative adventure. We continue to remain committed to this process. While our administrative leaders have communicated that outcomes-based assessment is expected and that there are budgetary consequences for not participating, Sarah Rajala, Associate Dean of Research for the College of Engineering, best sums the consequences of not participating in the following:

While accreditation may be at stake for some programs, we believe that an assessment process provides the ultimate enticement for those who are truly committed to student learning: a way to know whether what we are doing matters.

I know the faculty here at NC State are excellent teachers and researchers and that, consequently, they are eager to know in some definitive ways that their students understand and can apply course or program content. This process of academic program review not only allows the faculty to know that they are making a difference, but also allows them to determine what a student should be able to know or do and the resulting evidence that would be most meaningful to them.

Faculty who "refuse to participate" may quickly find themselves outside a meaningful discussion of learning in their discipline at NC State. I believe that as involved as our faculty are in all matters of learning, that isolation from the discussion would be an untenable place to be. Fortunately, it is also an unnecessary place to be. We are eager for all faculty to engage in the discussion of what their profession "looks like" when evidenced in their students.

[[http://www.ncsu.edu/provost/academic\\_programs/uapr/FAQ/UAPRFAQwhatifrefuse.html](http://www.ncsu.edu/provost/academic_programs/uapr/FAQ/UAPRFAQwhatifrefuse.html)]