INSTITUTIONAL ASSESSMENT
AT THE UNIVERSITY OF VERMONT

2007-2008

Office of the Provost

July, 2008
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction: Overview of Institutional Assessment 2007-2008</td>
<td>3</td>
</tr>
<tr>
<td>I. Assessment of Institutional Performance</td>
<td>4</td>
</tr>
<tr>
<td>II. Assessment of Learning Outcomes</td>
<td></td>
</tr>
<tr>
<td>University-Wide</td>
<td>6</td>
</tr>
<tr>
<td>School/College</td>
<td>10</td>
</tr>
<tr>
<td>Academic Programs</td>
<td>14</td>
</tr>
<tr>
<td>III. Assessment of Academic Programs</td>
<td>22</td>
</tr>
<tr>
<td>IV. Assessment of Campus Offices and Services</td>
<td>28</td>
</tr>
<tr>
<td>Appendix A: Currently Active Academic Degree Programs</td>
<td>31</td>
</tr>
<tr>
<td>Appendix B: Academic Program Review Inventory</td>
<td>36</td>
</tr>
<tr>
<td>Appendix C: Assessment Standards for UVM Academic Program Review</td>
<td>39</td>
</tr>
<tr>
<td>Appendix D: Respondents for the Assessment Study of Campus Services, Programs, and Offices</td>
<td>40</td>
</tr>
<tr>
<td>Appendix E: About the UVM Assessment Council</td>
<td>42</td>
</tr>
</tbody>
</table>
Introduction: Overview of Institutional Assessment 2007-2008

The University of Vermont is a successful educational institution. Application and matriculation data tell us that students apply and come, and test and graduation data tell us that, once here, they learn and earn degrees. Similarly, elaborate systems of academic credentialing and career-long peer review of research, teaching, and service tell us that well-educated faculty members come to UVM and enjoy successful academic careers as teachers, scholars, and citizens. University life is filled with assessment – office and computer files are crammed with evidence of this – but it is largely assessment of individual performance. And so we claim institutional success, and rightfully so, because the proxies for the academic achievement and success of individuals – good grades and high retention and graduation rates (for students) and educational pedigree, degrees, promotions, and expanding vitae (for faculty) – are abundant.

A successful institution is not the same as an effective or excellent institution. There are hundreds of successful colleges and universities, but fewer effective and excellent ones. Student and faculty academic performance is realized in an organizational context that makes individual excellence and success more or less of an important value, more or less difficult to achieve. Thus, effectiveness and excellence may have as much to do with how we assemble, combine, and set in motion all of the elements of the academic enterprise as they do with individual capacity and motivation.

Ensuring academic excellence and effectiveness, then, requires that we shift our gaze from the individual to the organization. Institutional rather than individual assessment helps us interrogate the ways we put things together to achieve our goals. It is foremost an organizational critique, suggesting that university effectiveness, student learning, and program and service quality are organizational accomplishments. It assumes that the human, fiscal, environmental, technological, and physical resources of the academy can always be organized better to promote and enact the creation, dissemination, and application of knowledge.

The review of the university’s strategic plan and preparation of the university’s re-accreditation self-study report constitute the more immediate context for this organizational scan of institutional assessment. Four specific areas have been targeted: (1) assessment of institutional performance, (2) assessment of learning outcomes at the institutional, school/college, and academic program levels, (3) assessment of academic programs, and (4) assessment of campus offices and services. In each case, the goal has been to highlight how we undertake institutional assessment at UVM, what we’ve learned from it, and what actions have resulted from this knowledge. This effort has been organized by the Provost’s Office, with input and support provided by the UVM Assessment Council whose membership and roles are described in Appendix E.
I. Assessment of Institutional Performance

Background

The strategic plan that has guided the University of Vermont for most of this decade was approved by the Board of Trustees in October of 2000, and its continuing development and elaboration was “acknowledged with enthusiasm” by the Board in May of 2003. At that time, it was envisioned that the plan would guide the university for the next five years. Anticipating the need to review and revise the strategic plan, President Daniel Mark Fogel appointed a reconstituted University Planning Council (UPC) in January of 2007. Chaired by Provost John Hughes, the UPC was charged to assess the existing strategic plan and to ensure that the subsequent work to revise the plan was well integrated with the campus’ NEASC re-accreditation self-study process.

The 2003 plan included a vision statement, mission statement, and seven goals, and was later augmented with an extensive list of action steps, referred to as the “Matrix for Advancing UVM.” Annual updates to the matrix offered evidence of action step accomplishments, but did not directly address the question of the degree to which the university was successful in achieving its strategic goals. The assessment task for the UPC was to define performance indicators for each goal, collect and analyze data related to each indicator, and use the findings of that analysis to critique the current state of the university and inform a revision of the strategic plan.

Methodology

The University Planning Council met monthly from February to May, 2007 and developed a matrix of over 160 performance indicators for the seven strategic goals. Data for most indicators were plotted over the prior five years with peer comparisons, where available. The UPC agreed on a framework for creating and disseminating a smaller set of metrics, which was then developed over the summer months. In early fall, the UPC reviewed a draft of the Strategic Plan Performance Indicators Report, which included 48 metrics. A final draft was presented to the Board of Trustees at its November 2007 meeting and was posted on the President’s homepage. The outcome – a document entitled “Strategic Plan Performance Indicators Report” – is accessible online at: http://www.uvm.edu/president/strategic_planning/SPPI_Metrics_FINAL.pdf. UPC retreats in November and December and the President’s Senior Leadership retreat in January 2008 drew on the report to assess UVM’s progress in achieving its goals and to suggest new and revised goals for the next plan.

Findings and Actions Taken

The University Planning Council concluded that UVM was headed in the right direction, that the list of accomplishments in support of the strategic plan was lengthening and impressive, but there was still work to be done. Highest marks were assigned to progress and achievements relating to financial strength, organizational alignment, and academic program development. Greatest concerns were expressed in relation to the university’s
diversity and research goals. More generally, the UPC emphasized the importance of focusing and prioritizing the university’s academic initiatives and tying the new goals and action steps more closely to the revised vision and mission statements. These conclusions, coupled with President Fogel’s argument (articulated in “Continuing UVM’s Advance: Contexts for a Refocused Strategic Plan,” 2008) that the essential strategic priority of sustaining the advance of UVM must be the vigorous pursuit of academic distinction and distinctiveness, generated a five-goal strategic plan that calls for greater academic definition and focus. Anticipating Board of Trustee approval in September of 2008 following the Faculty Senate’s approval in May, working groups will be appointed and convened around each of the five goals in the fall semester of 2008 and charged with defining and refining action ideas and creating appropriate metrics for the ongoing assessment of progress. Their work will come back to the UPC which will then prioritize and integrate these ideas into a campus action plan. With metrics defined at the outset rather than years into the implementation of the plan, monitoring and assessment of institutional progress and achievement will be an ongoing endeavor. “Strategic Plan 2009-2013: Sustaining the Advance” is available online at http://www.uvm.edu/president/?Page=strategicplan2009_2013.html
II. Assessment of Learning Outcomes

a. University-Wide

Background

The university has adopted two campus-wide undergraduate requirements in recent decades: a two-credit physical education requirement and a six-credit diversity requirement.

**UVM Physical Education Requirement** (from the UVM website):

“In order to graduate, all UVM students in four year programs are required to take one year (2.0 credits) of Physical Education, and all students in two year programs are required to take 1.0 credit of physical education. Students 25 years of age or older at the time of admissions or readmission are exempt from this requirement. However, since the two credits are included in the total hours required for graduation, they will need to earn two credits from another area. All transfer students under the age of 25 must complete the physical education requirement. In addition to taking a Physical Education Activity Class (PEAC), students may earn Physical Education credit through Varsity Sport Credit, Club Sport Credit, Credit by Exam, and Independent Study.”

**UVM Diversity Requirement** (from the UVM website):

(Full proposal available at http://www.uvm.edu/~facsen/RevisedDiversityProposal041006.pdf)

“Beginning with the first-year class entering during the Fall 2007 semester, all undergraduate degree candidates must successfully complete one three-credit Diversity course from **Category 1** (Race and Racism in the U.S.) or **Category 2** (Human and Societal Diversity). This requirement will apply as well to undergraduate transfer students receiving bachelor's degrees in May or December 2011.

Beginning with the class entering during the Fall 2008 semester, all undergraduates must successfully complete one three-credit course from **Category 1** (Race and Racism in the U.S.) and a second three-credit course from either **Category 1** or **Category 2** (Human and Societal Diversity). These requirements will apply as well to undergraduate transfer students receiving bachelor's degrees from May 2012 onward. (For approved courses refer to Web Page.)

**General Education:**

The university has no formal campus-wide general education requirement, although recent history suggests some convergence in how the university community thinks about liberal education and student learning outcomes. In 1999, the Academic Affairs
Committee (AAC) initiated a consideration of the establishment of core competencies for all UVM undergraduates. Just prior to President Fogel’s arrival in 2002, the AAC Subcommittee on Curricular Cohesiveness released a report in which it proposed “core areas of knowledge, skills, and awareness.” The proposal was not formally approved. Since President Fogel’s arrival, the university’s vision and mission statements have featured the idea that UVM will be “preeminent in our comprehensive commitment to liberal education . . .” and President Fogel has encouraged the faculty to consider collectively how to realize this commitment at UVM. At a meeting of the Faculty Senate on October 11, 2004, faculty members exchanged views on the various meanings of liberal education and the knowledge, skills, and values that a 21st century graduate should possess. Two years later on December 11, 2006, upon the release of his “Signatures of Excellence” essay, President Fogel urged the faculty to explore ways to ensure that students acquire the qualities defined by UVM’s distinctive signature. More recently, a revised mission statement approved by the Faculty Senate in May of 2008 and scheduled for action by the Board of Trustees in September of 2008 has drawn on these and other prior conversations to articulate specific learning outcomes:

To create, evaluate, share, and apply knowledge and to prepare students to be accountable leaders who will bring to their work dedication to the global community, a grasp of complexity, effective problem-solving and communication skills, and an enduring commitment to learning and ethical conduct.

The study of school/college-level requirements described in the next section also suggests a voluntary and gradual evolution toward a common conception of liberal education learning outcomes that underlies each undergraduate college’s distribution requirements for graduation.

Assessment

Physical Education:

The physical education requirement was enacted at UVM in the post World War II years when community facilities were limited and educational institutions were seen as the major sites for physical activity. Since the 1980s, the requirement has been a focus of debate on campus, but it has remained in force. Following in depth study and public hearings in 2000, a Faculty Senate resolution to eliminate the requirement failed to pass. Degree audits establish whether or not candidates for the baccalaureate degree have satisfied the requirement, but there is no record of a recent university-wide assessment of its intended outcomes. The Physical Education Department reports that its surveys of physical education students suggest that they enjoy the classes but do not favor a physical education requirement. In recent years, increasing frustration among students over the implementation of the requirement has produced two votes in 2008 -- one by the Student Government Association (SGA) recommending dissolution of the requirement, and one by the Academic Dean’s Council supporting the Provost’s transmittal of the SGA vote to the Faculty Senate for formal action. The SGA resolution is reprinted below to
underscore that this action represented a critique of the program rather than of its aims, a perspective shared by the Academic Dean’s Council. Whether or not the broader goals of a physical education requirement will become concretized in the ongoing development of the revised strategic plan, a plan framed by a vision of the university “as preeminent in our comprehensive commitment to . . . health . . .” remains to be seen.

SGA Senate Resolution/Bill No.: RF07-018

RESOLUTION RECOMMENDING THE DISSOLUTION OF THE UNIVERSITY’S PHYSICAL EDUCATION CREDIT GRADUATION REQUIREMENT

WHEREAS the University of Vermont has a 2-credit physical education requirement for all students,

WHEREAS there are too few physical education classes, offered often in irregular class times, that frequently require additional fees to take,

WHEREAS without priority registration, many people are unable to register for physical education courses until their senior year, frequently posing problems for those who have other requirements to fulfill for graduation,

LET IT BE KNOWN that the University of Vermont Student Government Association sees the value in a physical education requirement, and that when functioning properly such a requirement can foster and promote healthy lifestyles for University of Vermont students.

LET IT BE KNOWN that the University of Vermont Student Government Association finds the physical education requirement to have insufficient support from the University in offering enough varied classes to function as a general requirement,

LET IT BE KNOWN that the University of Vermont Student Government Association believes it necessary that the currently dysfunctional physical education requirement be dissolved immediately unless the number of courses and times be greatly increased and the class fees reevaluated.

Diversity:

In contrast, the university-wide diversity requirement passed by the Faculty Senate in 2006 was structured around an explicit set of diversity competencies framed as learning outcomes (reprinted below). In addition, the Senate resolution included a richer assessment plan than originally proposed (also reprinted below). A standing committee – the Diversity Curriculum Review Committee (DCRC) – was established to oversee the implementation of the requirement, and it has since created a research subcommittee to focus on the development and implementation of an assessment plan.
Diversity Competencies

Cognizant of the role we can play in educating our students for participation in a multicultural world, the President’s Commission on Racial Diversity has identified the following eight diversity competencies as goals for all undergraduate students at the University of Vermont.

1) A multidisciplinary appreciation of diverse cultures, communities, and histories that constitute U.S. society, as well as awareness of global issues regarding diversity.
2) An understanding of U.S. traditions of democracy, active citizenship and how they may serve as a means to understand and resolve conflicts linked to race, class, ethnicity, and gender issues.
3) An ability to describe the nature, historical patterns, and demographics of American society in terms of race, ethnicity, gender, and class differences.
4) An ability to carry out an intellectual discourse with diverse peoples for the purpose of evaluating public policy and creating a shared future vision of American society.
5) The development of problem solving and analytical skills about diversity, while acquiring an understanding of the diversity of American culture and other cultures across the globe.
6) Knowledge of the origins and systemic nature of prejudice, discrimination and oppression that has been directed toward people of diverse backgrounds and orientations.
7) A capacity to visualize and imagine public situations or issues involving diversity from multiple perspectives. The development of capacity to construct action plans for dealing with issues of diversity in the workplace, organizations, and the community.
8) An understanding of the current experiences and issues in the United States of different racial groups (including discrimination in all forms, life experiences of racial groups and white privilege.)

Diversity Requirement Assessment Addendum to Approved Policy

We request that the Provost’s Office consider ways to expand the evaluation procedures currently proposed (i.e., exit surveys with graduating students). Evaluation should occur following the first two years of implementation of the proposal and on a regular basis following the initial evaluation. The evaluation should include measures designed to obtain input from students, faculty, staff, and administrators regarding the effectiveness of the requirement in relation to its overall aims and objectives, as well as the processes used to implement it. Some or all of the evaluation should be conducted by an external reviewer, using rigorous evaluation measures.
**General Education:**

As noted above, although UVM aims to be “preeminent in our comprehensive
commitment to liberal education . . .”, there is no codified university-wide undergraduate
general education requirement at this time. However, UVM will participate in the
National Association of State and Land Grant Universities and Colleges’ (NASULGC)-
sponsored Voluntary System of Accountability (VSA) program, which requires the
reporting of first-year and senior-year student scores from any one of three nationally
recognized standardized exams that purport to assess liberal education skills – analytical
reasoning, critical thinking, writing, etc. UVM is one of 13 colleges and universities
selected to participate in a U.S. Department of Education funded national Test Validity
Study (TVS) during the fall of 2008 in which the construct validity of the three tests –
Collegiate Assessment of Academic Proficiency (CAAP), Collegiate Learning
Assessment (CLA), and Measure of Academic Proficiency and Progress (MAPP) – will
be examined. UVM will draw on the results of the TVS and the input of an internal
advisory group to select one of the tests for assessing liberal education outcomes in future
years.

**b. School/College Learning Outcomes**

**Background**

Beside the UVM-wide diversity and physical education requirements, all requirements
for the undergraduate degree are defined by each of the seven undergraduate
schools/colleges. The Graduate College establishes university-wide requirements for all
graduate programs except the M.D. degree. The study of school/college learning
outcomes assessment began with questions about the prevalence and variety of
school/college requirements and whether or not such requirements were derived from
statements about school/college-wide learning goals.

**Methodology**

Following extensive Assessment Council discussion in which school/college
representatives described different local requirements but discovered convergence in their
underlying rationales, representatives of the seven undergraduate degree granting
schools/colleges and the Honors College prepared and posted materials according to the
following rubric:

I. (a) Statement of codified school/college level undergraduate degree
requirements or competencies.
(b) Educational rationale for these requirements/competencies, particularly in
terms of desired learning outcomes.
II. Description of curricular “commonalities” across the school/college that are not formally codified as school/college requirements but are experienced by all students as a result either of being required by all majors in the school/college or of course registration patterns. [If appropriate, “segment” the school/college and discuss more than one set of commonalities.]

III. Description of any efforts to assess directly or indirectly the extent to which the underlying learning objectives of requirements or commonalities are achieved.

IV. Description of existing or planned efforts at the school/college level to define, refine, and/or assess college-level requirements.

Findings

- Most colleges define degree requirements beyond the major and minor. For those that do not, there are identifiable “commonalities” that, as a result of being required for all, or almost all, majors within the school/college, function as de facto school- or college-wide requirements.

- Although the specific requirements and commonalities vary across the colleges, they are all expressed in terms of broad exposure to the liberal arts and sciences, reflecting the vision of UVM to be “preeminent in our comprehensive commitment to liberal education . . .” This unifying principle and its expression in school/college distribution requirements or commonalities essentially defines general education at UVM as broad exposure, creates a structural interdependence among the schools and colleges, and charges the College of Arts and Sciences, by far the largest of the undergraduate colleges, with the task of delivering most of the general education curriculum to the entire undergraduate population.

- Within the College of Arts and Sciences itself, general education is defined as breadth of exposure which translates into required course work within each of seven areas – fine arts, literature, mathematics, humanities, social sciences, natural sciences, and foreign language.

- Three of the remaining six degree-granting undergraduate colleges have distribution requirements (SBA, CALS, RSENR); three have distribution commonalities (CNHS, CEMS, CESS). All prescribe breadth of exposure in the liberal arts and sciences, although the degree of breadth varies.

- Colleges have mapped their exposure requirements against specific learning outcomes to varying degrees. Outcomes that appear with some frequency across the narratives provided by the schools/colleges include the following:
Knowledge of specific content related to the mission of the school/college
Critical thinking and analytical reasoning
Written and oral communication
Quantitative reasoning and analysis
Understanding of how knowledge is created
Broad perspective and understanding of the human condition
Integration of theory and practice
Mastery of information technology

- Assessment Council members agree that within their schools/colleges, the assumption is that exposure to humanities, physical sciences, and social sciences content enables students to achieve the general education outcomes listed above. Degree Audits certify the completion of exposure requirements in each school/college and, although course evaluations are widespread and more general student surveys are administered in a few schools/colleges, general education competencies are typically not tied to specific liberal arts courses and there is very little systematic direct or indirect assessment of general education learning outcomes at the school/college level.

- Most of the schools/colleges have undergone substantial curricular reform in recent years or major reform initiatives are under discussion, and most are working toward the development of school/college-level strategies for assessing outcomes.

A&S: All seven areas of exposure required (no opting out); aligning BS general education requirements with BA
SBA: New learning goals and objectives
RSENS: Curriculum reform to define core and general education curriculum in terms of student outcomes
CALS: Core competencies with assessment plan
Honors: Change in focus of first-year seminar
CEMS: Curriculum 21 initiative – re-examination of all curricula
CESS: Re-visioning the Department of Education initiative
CNHS: Inter-professional curriculum development
COM: Vermont Integrated Curriculum based on defined competencies

- The Graduate College establishes university-wide requirements for all master’s and doctor of philosophy degree programs at UVM. These include (quoted from the Graduate Catalogue):

  **Time to degree limits:**
  Master’s degree full-time student: 3 years
  Master’s degree part-time student: 5 years
  Doctoral degree student: 9 years

  **Minimum residence requirements:**
Master’s degree: 21 credits
Doctoral degree: 51 credits

**Master’s comprehensive examination:** “All master’s degree students are required to pass a written and/or oral comprehensive examination in their field of specialization.”

**Doctoral comprehensive examination:** “A written comprehensive examination in the field of study must be passed by the candidate . . . “

**Doctoral Teaching Requirement:** “All doctoral candidates must acquire appropriate teaching experience in their chosen fields prior to the award of the degree.”

**Doctoral Research and Dissertation:** “Each candidate . . . must complete an acceptable original research project which contributes new knowledge or techniques in an academic field.”

Although these requirements are not accompanied with explicit formal learning goals, time to degree and residence requirements are typically designed to ensure currency of knowledge as defined by the institution’s graduate faculty at the time of graduation. Comprehensive examinations are meant to test in-depth mastery of subject matter while dissertation research requires demonstration of ability to conduct independent, original research. Assessment occurs in the context of examination committee deliberations on a case by case basis.

- The College of Medicine establishes the requirements for the doctor of medicine degree. Successful completion of the degree requires:

**MD competency examinations:** All MD degree students are required to pass Step 1 and 2 CK of the United States Medical Licensing Exams (USMLE). Step 1 assesses application of knowledge and understanding of key concepts of basic biomedical science, with an emphasis on principles and mechanisms of health, disease, and modes of therapy. Step 2 CK assesses application of medical knowledge and understanding of clinical science considered essential for the provision of patient care under supervision, including an emphasis on health promotion and disease prevention.

**Conclusions**

- There is evidence of a common conception of liberal education learning outcomes that underlies each undergraduate school/college’s distribution requirements for graduation.
There is evidence of significant effort at the undergraduate school/college level to define learning outcomes more explicitly, which is the essential first step in the development of learning outcome assessment plans at the school/college level.

In general, at present, the outcomes of exposure are not assessed directly.

c. Academic Programs

Background

Requirements and curricula within majors and degree programs typically reflect a sense of the relevant knowledge domain and how best to organize it. Becoming a college or university professor involves entering a system of shared meanings – some derived from the wider academic discipline; others from the local institutional setting – that defines the domain and its internal organization at a particular place and time. Individual faculty members claim expertise in various areas of the domain and are assigned courses, the vehicle for communicating knowledge domains and assessing student mastery of them. Often implicit in the transformation of a knowledge domain into curriculum are notions of what students should learn. Academic programs involved in educating for professional practice have made those notions formal and explicit as they have grappled with their complex accreditation and licensing environments. Increasingly, liberal arts programs are being asked to do the same, and to investigate systematically the extent to which such learning outcomes are realized.

There is substantial anecdotal evidence of assessment at UVM in general, but little information about the prevalence of formal learning outcome assessment at the academic program level. Two consultants on learning outcome assessment visited UVM during 2006-2007 (Professor Paul Anderson, Miami University; and Professor Emerita Barbara Walvoord, University of Notre Dame) to conduct workshops with academic programs on learning outcome assessment. This section describes the status of learning outcome assessment at the program level at UVM.

Methodology

Although learning outcome assessment is appropriate for any programmatic structure that is organized around a set of learning goals (i.e., undergraduate major, minor, concentration, certificate program, graduate degree), this inventory defined the universe of study as all active undergraduate majors and graduate degree programs. This program array is listed in Appendix A, and consists of 95 undergraduate majors, 52 master’s degree programs, and 22 doctoral degree programs. Not included are new programs that have received approval but have not yet been implemented. Multi-college sponsored programs are listed and counted only once under the school/college tenure-home of the program director.
Because UVM’s accrediting body, the New England Association of Schools and Colleges (NEASC), now requires its participating institutions to make assessment more explicit in self-study documents through the submission of a completed template that provides a program-by-program inventory of assessment practices ("E1A, Inventory of Educational Effectiveness Indicators"), the Assessment Council chose to use that template as the data collection instrument for this survey of 169 UVM programs. For each program, the template asks:

1. Have formal learning outcomes been developed?
2. Where are these learning outcomes published?
3. Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?
4. Who interprets the evidence? What is the process?
5. How are the findings used? Note changes that have been made as a result of using the data/evidence.
6. Web address for full documentation

Assessment Council members were responsible for gathering the data on each program within their respective schools/colleges. Once submitted, analytical categories were developed from the responses and quantitative frequencies were calculated. The data provided by each program have been entered into a spreadsheet. (See E1A).

Caveat: The open-ended questions in the template produced responses that varied greatly in terms of level of detail and specificity. A reasonable interpretation is that some respondents offered only illustrative examples of assessment work whereas others provided exhaustive accounts. Therefore, the aggregation of these responses cannot be viewed as a rigorously exhaustive portrait of the state of assessment activities in academic programs.

Findings

- 80 of 95 undergraduate majors (84%) have developed formal learning outcomes.

  CALS: 11 of 13 (85%)
  CAS: 37 of 46 (80%)
  SBA: 1 of 1 (100%)
  CESS: 12 of 12 (100%)
  CEMS: 5 of 9 (56%)
  RSENR: 7 of 7 (100%)
  CNHS: 7 of 7 (100%)

- All 80 undergraduate majors with formal learning outcomes identify web addresses where the learning outcomes can be found. Eighteen of the 80 majors (23%) include program learning outcomes on course syllabi. Twenty-five of the
80 (31%) publish learning outcomes in student or program handbooks. Only 4 of 37 (11%) CAS majors with learning goals report communicating this material beyond posting on a website. Of the non-CAS majors with learning outcomes, 28 of 43 (65%) communicate learning goals beyond the website. CEMS and CALS are more like CAS. Almost all of the majors in four schools/colleges -- SBA, CESS, RSENR, and CNHS – report using more than one method to communicate learning outcomes.

- Nine types of assessment methods were identified from the responses to the question regarding assessment evidence (6 direct methods; 3 indirect methods). The number and proportion of the 80 undergraduate majors with learning goals using each method is as follows:

<table>
<thead>
<tr>
<th>Method</th>
<th>#Programs</th>
<th>%Programs (of 80)</th>
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<tbody>
<tr>
<td><strong>Direct Measures</strong></td>
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<tr>
<td>Capstone Course</td>
<td>41</td>
<td>51%</td>
</tr>
<tr>
<td>Coursework (incl internships) evaluated in terms of program learning goals</td>
<td>32</td>
<td>40%</td>
</tr>
<tr>
<td>Senior Paper Assessment</td>
<td>17</td>
<td>21%</td>
</tr>
<tr>
<td>National Standardized Exam</td>
<td>19</td>
<td>24%</td>
</tr>
<tr>
<td>Portfolio Review</td>
<td>9</td>
<td>11%</td>
</tr>
<tr>
<td>Departmental Exam</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Indirect Measures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduation Senior Survey</td>
<td>43</td>
<td>54%</td>
</tr>
<tr>
<td>Alumni Survey</td>
<td>42</td>
<td>53%</td>
</tr>
<tr>
<td>Student Honors and Awards</td>
<td>17</td>
<td>21%</td>
</tr>
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</table>

- Two operationalizations of the richness of evidence/methods were developed: the first provides a simple count of how many different kinds of methods are used by academic programs; the second examines the prevalence of assessment plans that combine direct and indirect methods of assessment.

(1) Number of assessment methods used by each program by school/college:

<table>
<thead>
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<th># of methods used</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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# of programs:

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<th>School/College</th>
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<th>3</th>
<th>4</th>
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<td>CALS (11)</td>
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<td>5</td>
<td>23</td>
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<td>CAS (37)</td>
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<td>CEMS (5)</td>
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<td>3</td>
<td>2</td>
</tr>
<tr>
<td>RSENR (7)</td>
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<td>0</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>CNHS (7)</td>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL: 1 10 27 18 15 9
%: 1% 13% 34% 23% 19% 11%

(2) Number of programs using both direct and indirect methods of assessment by school/college:

<table>
<thead>
<tr>
<th>School/College</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALS (11)</td>
<td>5 (45%)</td>
</tr>
<tr>
<td>CAS (37)</td>
<td>29 (78%)</td>
</tr>
<tr>
<td>SBA (1)</td>
<td>1 (100%)</td>
</tr>
<tr>
<td>CESS (12)</td>
<td>9 (75%)</td>
</tr>
<tr>
<td>CEMS (5)</td>
<td>5 (100%)</td>
</tr>
<tr>
<td>RSENR (7)</td>
<td>7 (100%)</td>
</tr>
<tr>
<td>CNHS (7)</td>
<td>7 (100%)</td>
</tr>
</tbody>
</table>

TOTAL (80): 63 (79%)

- Virtually all programs with defined learning outcomes describe a deliberative process for interpreting assessment data and using that information to improve the academic program. The typical pattern is for a subset of the program faculty to collect data and interpret findings and for the full faculty to discuss recommended changes.

- Three ways of examining the use of assessment findings to strengthen academic programs are presented: the prevalence of different kinds of program reforms; the number of programs instituting assessment-driven changes; the scope of reform efforts within programs making changes.

(1) Number of categories of reforms made by each program by school/college:

Reform Categories:
1 = course content
2 = degree requirements
3 = pedagogical changes
4 = new courses/programs
5 = course requirements
6 = changes in student advising

Reform Categories: 1 2 3 4 5 6

# of programs:

<table>
<thead>
<tr>
<th>School/College</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALS (11)</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CAS (37)</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>SBA (1)</td>
<td>1</td>
<td>0</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CESS (12)</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
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<td>CEMS (5)</td>
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<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>RSENR (7)</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>CNHS (7)</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

TOTAL (80): 27 13 10 10 6 6

% of programs: 34% 16% 13% 13% 8% 8%

(2) Number and proportion of programs that made changes by school/college:

<table>
<thead>
<tr>
<th>School/College</th>
<th>Number of Changes</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALS (11)</td>
<td>8 (73%)</td>
<td></td>
</tr>
<tr>
<td>CAS (37)</td>
<td>14 (38%)</td>
<td></td>
</tr>
<tr>
<td>SBA (1)</td>
<td>1 (100%)</td>
<td></td>
</tr>
<tr>
<td>CESS (12)</td>
<td>8 (67%)</td>
<td></td>
</tr>
<tr>
<td>CEMS (5)</td>
<td>2 (40%)</td>
<td></td>
</tr>
<tr>
<td>RSENR (7)</td>
<td>2 (29%)</td>
<td></td>
</tr>
<tr>
<td>CNHS (7)</td>
<td>6 (86%)</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL (80): 41 (51%)

(3) Scope of change: Of the programs in each school/college that made changes, the number that made changes in a given number of reform categories

CALS (8): All 8 programs made changes in one category.
CAS (14): 6 programs made changes in one category; 8 programs made changes in two categories.
SBA (1): 1 program made changes in two categories.
CESS (8): 6 programs made changes in one category; 1 program made changes in two categories. 1 program made changes in three categories.
CEMS (2): 2 programs made changes in three categories.
RSENR (2): 2 programs made changes in three categories.
CNHS (6): 6 programs made changes in one category; 1 program made changes in three categories. 2 programs made changes in four categories.

TOTAL (41): 20 programs (49%) made changes in one category. 13 programs (32%) made changes in two categories. 6 programs (15%) made changes in three categories. 2 programs (5%) made changes in four categories.

- Program-specific learning outcomes are less common in graduate programs. Assessment Council members were able to identify 18 of 52 master’s programs (35%) and 7 of 22 doctoral programs (32%) with learning outcomes. Very few changes as a result of assessment are reported for master’s programs. At both the master’s and doctoral levels, assessment of learning goals focuses on evidence provided by the evaluation of thesis and dissertation work.

Master’s Programs with Learning Outcomes

CALS (10): 0 (0%)
CAS (15): 3 (20%)
SBA (1): 1 (100%)
CESS (10): 10 (100%)
CEMS (9): 0 (0%)
RSENR (1): 1 (100%)
CNHS (1): 1 (100%)
COM (5): 2 (40%)

TOTAL (52): 18 (35%)

Doctoral Programs with Learning Outcomes

Psychology, Natural Resources, Neuroscience, Molecular Physiology and Biophysics Ph.D., Ed.D., DPT, MD

Conclusions
• The vast majority of UVM’s undergraduate degree majors has developed formal learning outcomes for their programs.

• All programs with formal learning outcomes communicate this information via the web. Programs outside of the College of Arts and Sciences are more likely to publish this information in additional outlets such as student handbooks and course syllabi.

• Assessment at UVM includes both direct and indirect methods of data gathering. The most common direct methods involve evaluation of student work in capstone courses or in other advanced courses in which student performance is assessed in terms of the overall learning goals of the major. The use of national standardized examinations is less prevalent, but typical in majors that prepare students for professional practice. Senior and alumni surveys are the most common type of indirect assessment method, with over one-half of all of the programs with learning outcomes reporting that they survey current or former students.

• Most programs use multiple methods and almost four-fifths of those doing assessment employ both direct and indirect methods.

• Just over one-half of the undergraduate majors with assessment plans report making changes based on assessment evidence. Course content changes are the most commonly reported type of reform. Of those programs that have made changes, one-half have done so in more than one category of reform.

• Assessment Council members report that implementing assessment plans within their schools/colleges has produced improvement and innovation in the assessment process itself such as modifications in assessment methodology and refinement of learning goals.

• Overall, the findings indicate that the establishment of learning goals at the undergraduate program level is widespread and approaching universality. Evidence-gathering activities suggest both breadth and depth across the campus, even though they are still under development in several programs. Evidence-based reform is less prevalent, but still substantial, and is expected to increase as more programs implement and complete their first full cycle of the assessment process.

• Based on their experiences within their schools/colleges and interactions with academic program representatives, Assessment Council members defined two areas of need: (1) a formally constituted and sanctioned body responsible for articulating an institution-wide vision and plan for assessment beyond the accreditation process and then implementing it, and (2) a technical assistance capacity that can satisfy program and college needs for assessment guidance and expertise through best practice workshops, individual consultation, and centralization of widely-endorsed strategies and practices.
• Not analyzed here is the substantive content of program learning outcomes. However, a cursory review of the individual program assessment plans suggests that many programs develop learning goals that relate to liberal or general education outcomes rather than being focused exclusively on disciplinary content or competencies.

• This inventory understates the scope of both assessment dialogue and innovative curricular change. Assessment Council members described numerous examples of faculty discussions of varying degrees of formality that produced curricular change, and many reforms and innovations have been introduced in recent years that cannot directly be tied to evidence from formal assessment of learning outcomes.

• Assessment of program-defined learning outcomes is far less prevalent at the graduate level. This quite likely reflects the use of comprehensive examinations and thesis and dissertation work as capstone experiences beyond formal course work that require demonstration of mastery of a field and ability to contribute to the knowledge base of that field.
III. Assessment of Academic Programs

Background

In 2000, the UVM Faculty Senate approved the policy and procedures for the periodic and systematic review of academic programs. As we near the end of a full cycle of program reviews, our assessment of the academic program review (APR) process centers on four research questions: (1) To what extent do our programs meet the Faculty Senate’s standards of performance? (2) Are there patterns in the nature of the recommendations for program improvement that emerge from the process? (3) To what extent are recommendations addressed? (4) What improvements in the APR process are suggested by the first seven years of experience?

Methodology

Academic program review is conducted by the Faculty Senate’s Curricular Affairs Committee (CAC) according to the policy and procedures established by the Faculty Senate in 2000 (http://www.uvm.edu/~facsen/apr_document.pdf). An inventory of the APR progress as of 2008 produced Appendix B, which indicates that a total of 47 program review “clusters” has been approved by the CAC thus far. All 47 completed reviews were included in the first study to determine the extent to which UVM programs meet our internal standards of performance. Those seven standards are listed in Appendix C. In each review, the CAC assesses whether or not each standard is met.

For the second study of the status of program review recommendations, only those reviews that had been approved by CAC no later than early in the 2007-08 academic year were selected for study in order to allow time for a response to the recommendations (n = 38; see Appendix B for this subset). Recommendations embedded in the CAC reports were identified for each program cluster and sent to the appropriate dean’s office with a request that the dean indicate whether each recommendation had been substantially addressed, sufficiently addressed, minimally addressed, or not addressed at all. Deans were invited to consult with department chairs and program directors to make these assessments. Assessments were returned on 258 recommendations. Review recommendations were organized for analysis into broader categories using a two-step process that initially yielded 12 categories which were then collapsed into the following six categories:

Organizational Issues: program mission or focus; departmental/program organization and leadership; program planning; establishing a particular role/status within the university; communication about the program internally and externally; governance structures and processes; student advising and faculty mentoring; linkages with other organizational units both internally and externally; student recruitment strategies; external fundraising.
Resource Issues: support for administrative work, teaching, research, and equipment/technology; graduate assistant allocations; aligning with university priorities and initiatives; meeting increased student needs generated by increasing enrollment; managing teaching loads and class sizes in the face of increasing enrollment.

Faculty Issues: faculty recruitment needs; faculty diversity issues; faculty salary issues.

Space & Facility Issues: needs for additional space; health and safety concerns; equipment and technology purchases and support.

Curricular Issues: new program development; specific courses; managing student access to particular courses or curricular levels.

Assessment Issues: defining learning outcomes; developing appropriate direct and indirect methods of assessing learning outcomes; instituting programmatic changes based on assessment evidence.

Finally, during the 2007-08 academic year, CAC Chair Professor Cindy Forehand led the CAC in an open-ended discussion of the strengths and weaknesses of the APR process. Several suggestions for increasing the effectiveness of the process were offered and are summarized here.

Caveats: (1) APR subcommittees produce reports with varying breadth and depth so the universe of recommendations is not evenly distributed across the program clusters. (2) CAC-approved documents often contain recommendations that are not sanctioned in the Memoranda of Understanding that are subsequently drafted. By drawing on CAC recommendations rather than MOU documents, the study is including recommendations that not all parties to the APR process would agree should be addressed. However, because of a backlog of MOU agreements to be drafted, using the CAC recommendations produced a richer data set and, perhaps, a broader conception of “what needs to be done.” (3) No systematic methodology for determining the status of review recommendations was prescribed. As a result, there is variation in the voices and perspectives represented (e.g., dean only, department chair only, dean in collaboration with department chair) and in the ways in which respondents approached the task of assessing the degree to which a recommendation had been addressed. (4) Although most of the recommendations focused on one major issue, some were broad and wide-ranging, making them more difficult to fit neatly within one category.

Findings

- Assessment of programs against internal program review standards:
  n = 47 CAC approved clusters
Standard | % of clusters that do not meet the standard unequivocally (See Appendix C)

| 1 | 2% |
| 2 | 43% |
| 3 | 0% |
| 4 | 2% |
| 5 | 11% |
| 6 | 11% |
| 7 | 21% |

Total Number of standards not met | Number of programs

| 0 | 20 |
| 1 | 17 |
| 2 | 9 |
| 3 | 0 |
| 4 | 0 |
| 5 | 0 |
| 6 | 1 |
| 7 | 0 |

20 of 47 (43%) meet all standards without qualification.
17 of 47 (36%) meet all but one standard without qualification.
9 of 47 (19%) meet all but two standards without qualification.
1 of 47 (2%) does not meet six of the seven standards.

- Addressing APR Recommendations:
  n = 38 clusters; 258 recommendations

(1) Frequency of Types of Recommendations

<table>
<thead>
<tr>
<th>#</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational</td>
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<tr>
<td>Resource</td>
<td>54</td>
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<tr>
<td>Assessment</td>
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</tr>
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<td>Faculty</td>
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<td>Curriculum</td>
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</tr>
<tr>
<td>Space &amp; Facilities</td>
<td>22</td>
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<tr>
<td>Total</td>
<td>258</td>
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</table>
(2) Frequency of Recommendation Dispositions

<table>
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<tr>
<th>Type</th>
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<td>26%</td>
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<tr>
<td>Sufficiently Addressed</td>
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<td>Minimally Addressed</td>
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<tr>
<td>Not at all Addressed</td>
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<td>17%</td>
</tr>
<tr>
<td>Total</td>
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<td></td>
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(3) Degree to which Various Types of Recommendations have been Addressed

<table>
<thead>
<tr>
<th>Type</th>
<th>Subst</th>
<th>Suff</th>
<th>Min</th>
<th>NotAt</th>
<th>Total</th>
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<tbody>
<tr>
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<td>28</td>
<td>21</td>
<td>6</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>29%</td>
<td>36%</td>
<td>27%</td>
<td>8%</td>
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<td>Resource</td>
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<td>54</td>
</tr>
<tr>
<td></td>
<td>24%</td>
<td>22%</td>
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<td>Faculty</td>
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<td>Curriculum</td>
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<td>45%</td>
<td>23%</td>
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<td>TOTAL</td>
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<td>75</td>
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<td></td>
<td>26%</td>
<td>29%</td>
<td>27%</td>
<td>17%</td>
<td></td>
</tr>
</tbody>
</table>

- Faculty Senate Curricular Affairs Committee Suggestions for APR process improvement (abridged):
Content –

The emphasis of program review self-studies should shift from an analysis of the past to a focus on the future.

It is often difficult for reviewers to determine the status of a particular program within the larger context of a school or college. Either as part of the self-study or as an institutionalized feature of the site visit, reviewers should receive information from the Dean regarding the priorities of the school/college and the position of the program in relation to those priorities.

Academic program review reports should emphasize concrete steps that should be taken to improve the viability and/or quality of the academic program.

Addressing issues related to program viability and quality often requires the involvement or cooperation of a variety of units – the department, school/college, Graduate College, Academic Affairs, and an array of academic and administrative offices. Program review recommendations and MOUs should identify responsible partners for addressing issues that require action.

Process –

External reviewers should have a greater role in the program review process. A more formally structured process for selecting reviewers should be developed, and site visits by the reviewers should be an integral part of the review process.

Many academic programs would benefit from institutional direction and technical support for student learning outcome assessment initiatives.

A formalized and transparent follow-up review process should be developed to ensure that agreed-upon action items are addressed to the extent possible.

The master program review schedule should be reviewed and reconstructed with the following considerations in mind: (a) There are too many programs to fit within a five-year cycle; consider lengthening the cycle; (b) Determine the best clustering of programs within each review; patterns of clustering should make substantive sense and result in the most efficient use of university resources; (c) Align the scheduling of reviews of externally accredited programs with planned accreditation site visits.

Reassess the CAC and APR subcommittee roles and processes to decrease the time between the completion of the self-study and formal action by the CAC, reduce redundancy in report writing, and ensure an appropriate match between the size and composition of the review subcommittees and the programs being reviewed.
Conclusions

- In general, the UVM program clusters reviewed thus far stand up well against our internal standards of performance. Four-fifths of the clusters meet either all seven standards or six of the seven standards without qualification.

- By far, standard 2 (“The program has qualified faculty and students as well as resources appropriate to accomplish its purposes and strengthen its educational effectiveness.”) is the standard least likely to be unequivocally met with 43% of the clusters not meeting this standard. However, the CAC has consistently made this judgment on the basis of lack of resources rather than of poor quality. Twenty-one percent do not meet standard 7 (“The program uses an identified plan for systematic evaluation and assessment of goals and purposes.”). These findings suggest that programs need more resources and a greater emphasis on assessment to increase their effectiveness in this area.

- Organizational issues account for almost one-third of the 258 APR recommendations studied. The resource and faculty issue categories, when combined, account for another one-third of the total.

- Overall, the distribution of recommendation dispositions is rather even across the four categories suggesting a significant degree of unevenness in responding to the recommendations. However, over one-half (55%) of the recommendations were judged to be substantially or sufficiently addressed, and those recommendations that were “not addressed at all” constituted the smallest of the four groups (17%).

- The responses to organizational, assessment, and curricular issues were the strongest, with over 60% of the recommendations in each category being judged as substantially or sufficiently addressed. Responses to faculty and resource issues indicated slightly less than half of the recommendations in each category being judged as substantially or sufficiently addressed. Only one-third of the space and facility issues were judged to be substantially or sufficiently addressed.

- The CAC assessment of academic program review at UVM has raised a number of issues related to content and process, suggesting that a revision of the APR policy and procedures is warranted. The Provost’s Office has begun working with the CAC to improve the effectiveness of academic program review.
IV. Assessment of Campus Offices and Services

Background

Assessment in higher education has typically emphasized teaching and learning, and much of this work to describe institutional assessment at the University of Vermont has indeed focused on student learning outcomes. However, improving institutional performance and effectiveness requires a broader view of the university, one that directs us to examine the state of assessment in our academic, administrative, and student support units.

Methodology

UVM Vice Presidents were contacted in February of 2008 and asked to identify relevant units within their respective divisions for a survey of assessment activities. Responses generated a list of 54 offices, and in March of 2008, a survey instrument was e-mailed to each office director/head. By May 27, 2008, all 54 offices had responded. (See Appendix D for a list of service/program/offices in this study.) The questions were modeled after those typically used to audit learning outcome assessment activities within academic programs:

- Does your service/program/office have a mission statement or published statement of purpose?
- Have formal goals for your service/program/office been developed?
- If yes to (1) and/or (2), how is your mission or goals communicated to your unit and primary constituents?
- How does your service/program/office support the institutional mission and strategic goals?
- What methods are used to gather data/evidence regarding whether or not your service/program/office achieves its goals or mission?
- List specific conclusions you have drawn from this data/evidence about your service/program/office’s effectiveness in achieving its goals or mission.
- List specific examples from the past five years of how you have used this data/evidence to improve your service/program/office.

Data were aggregated for the purpose of offering an institution-wide view of office/program/service assessment.

Caveats: (1) Vice Presidents were asked to define potential respondent offices in terms of those that “seem to have a coherent, well-defined scope of activities, often supervised by an individual with the title “Director” or something similar.” This generated a list of services/programs/offices that varies widely in terms of size, scope, and complexity. (2) Categories were developed for items 3, 5, 6, and 7 based on coding of the open-ended responses. It must be noted that respondents offered varying levels of detail, so the aggregation of these responses cannot be viewed as a rigorously exhaustive portrait of the
state of assessment activities in campus offices. (3) Virtually every service/program/office linked its work to the university’s mission statement or one or more of its strategic goals. As a result, no further analysis of the responses to the question of how the program supports the institutional mission was conducted.

Findings

- 51 of the 54 offices (94%) indicated that they had a mission statement or statement of purpose. Of the three that did not, two indicated that such a statement was under development.

- 49 of the 54 offices (91%) responded that they had developed formal goals for their unit. Of the five that did not, three indicated that goal statements were under development.

- 52 of the 54 offices (96%) identified at least one mechanism for communicating mission statements and/or goals. 26 of 54 (48%) identified one means of communication; 19 of 54 (35%) identified two means; 7 of 54 (13%) identified three means. Of the various types of mechanisms identified, 44 offices (81%) posted these documents on their websites, 20 (37%) communicated and discussed these documents in office meetings, workshops, or retreats, 13 (24%) listed these statements in brochures, publications, or manuals, 6 (11%) published them in special reports, and 2 (4%) posted them on bulletin boards.

- Ten types of assessment methods were identified: 51 of 54 offices (94%) used at least one method; 24 of 54 (44%) used two methods; 19 of 54 (35%) used three or more methods. The number and proportion of all offices using each method is as follows:

  - Client/User Surveys 25 (46%)
  - Service Usage/Participation/Transaction Data 21 (39%)
  - Focus Group/Individual Interviews with Users/Constituents 21 (39%)
  - External Benchmarking via National Surveys or Data Clearinghouses or External Consultants 16 (30%)
  - Evaluation of Workshops, Special Programs, or Events 10 (19%)
  - Staff Meeting/Annual Retreat Discussions Among Staff 8 (15%)
  - Client/User Profile Data 7 (13%)
  - Internal Audits and “Undercover” Operations 6 (11%)
  - Formal Recognition and Awards 4 (7%)
  - Input from Advisory or Governance Boards 4 (7%)

- 48 of 54 offices (89%) could provide specific conclusions that had been drawn from the analysis of assessment data. 32 of 54 (59%) offered conclusions that suggested they had gained a broad understanding of the general effectiveness
of their program/service/office. 25 of 54 (46%) drew conclusions related to the quality of the services they provided. 21 of 54 (39%) listed specific recommendations for improvement that had emerged from their assessment activities. 10 of 54 (19%) provided comments that suggested they had gained a deeper understanding of the process(es) of service delivery that their clients experienced. Almost one-half of the 54 offices (26 of 54; 48%) listed an array of conclusions that provided them with insights into two or more of the four “conclusion” categories.

- 47 of 54 offices (87%) listed specific actions taken in response to an analysis of assessment findings. 42 of 54 offices (78%) described specific improvements in existing services or programs. 32 of 54 offices (59%) listed actions that implied broader reforms of or innovations in their service delivery systems. 16 of 54 (30%) described changes relating to staff hiring, training, and/or development. 9 of 54 (17%) made modifications to their physical environments. More than one-half of the offices (33 of 54; 61%) listed an array of actions that addressed two or more of the four “action” categories.

Conclusions

- Almost all service/programs/offices have locally-produced statements that define mission and/or goals. These statements are communicated electronically, in written form, and in face-to-face interactions. Over one-half of the offices use multiple means to communicate these statements. Goal setting and communication is widespread.

- Virtually all offices with formal goals assess their work. The vast majority employ multiple methods of assessment. The most commonly used methods involve direct questioning of users/clients through surveys, interviews, or focus groups and analysis of client experience and/or staff performance from quantitative data on client profiles, transaction histories, or participation rates, and often in relation to external benchmarks. Discussions among staff members and with constituent or governance groups about service quality and needs are also used for assessment purposes.

- Overall, the vast majority of respondents use assessment data to draw conclusions about performance and effectiveness and then translate those conclusions into subsequent action steps. “Full-cycle assessment” appears to be the rule rather than the exception at UVM. The raw data on “actions taken in response to assessment activities” provides dramatic evidence of the extent to which continuous quality improvement is lived and valued in the academic, administrative, and student support sectors of the university.
Appendix A

Currently Active Academic Degree Programs
(Multi-College Sponsored Degree Programs Listed Only Once)
(Total n = 169)

BACHELOR’S DEGREE MAJORS (95):

<table>
<thead>
<tr>
<th>College of Agriculture and Life Sciences</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>Community and International Development</td>
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<td>Public Communication</td>
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<td>Sustainable Landscape Horticulture</td>
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<tr>
<td>Self-Designed Major</td>
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<tr>
<td>Integrated Biological Science (Multi-School/College)</td>
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<table>
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<td>Anthropology</td>
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<tr>
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<tr>
<td>AIS: European Studies</td>
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<tr>
<td>AIS: Latin America Studies</td>
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<tr>
<td>Latin</td>
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<td>Geography</td>
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<td>French</td>
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<td>Theatre</td>
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<td><strong>College of Education and Social Services</strong></td>
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<td>Art Education</td>
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<tr>
<td>Elementary Education</td>
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<tr>
<td>Middle Level Education</td>
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<td>Music Education</td>
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<tr>
<td>Physical Education</td>
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<td>Human Development and Family Studies</td>
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<tr>
<td>Teacher Education: Early Childhood Special Education (Age 3-6)</td>
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<tr>
<td>Teacher Education: Family and Consumer Sciences Education (5-12)</td>
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<tr>
<td>Social Work</td>
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<td>Mechanical Engineering</td>
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<td>Computer Science</td>
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<td>Computer Science: Computer Science and Information Systems</td>
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</table>
Mathematics  
Mathematics: Statistics  

**The Rubenstein School of Environment and Natural Resources**  
Environmental Sciences (Multi-School/College)  
Forestry  
Natural Resources  
Recreation Management  
Wildlife and Fisheries Biology  
Environmental Studies (Multi-School/College)  
Environmental Studies (Multi-School/College)  

**College of Nursing and Health Sciences**  
Medical Laboratory Science  
Nuclear Medicine Technology  
Radiation Therapy  
Nursing  
Nursing (for Registered Nurses)  
Athletic Training Education  
Exercise and Movement Science  

**MASTER’S DEGREES (52):**

**College of Agriculture and Life Sciences**  
Animal Science  
Community Development and Applied Economics  
Public Administration  
Microbiology and Molecular Genetics  
Dietetics  
Nutrition and Food Sciences  
Plant Biology  
Field Naturalist (Botany)  
Plant and Soil Science  
Biochemistry (Multi-School/College)  

**College of Arts and Sciences**  
Biology  
Chemistry  
Greek and Latin  
Greek and Latin  
Communications Sciences  
English  
Geology  
German  
Historic Preservation  
History  
Materials Science (Multi-School/College)  
Physics
Psychology  MA
French  MA

School of Business Administration
Business Administration  MBA

College of Education and Social Services
Curriculum and Instruction  MEd
Curriculum and Instruction  MAT
Educational Leadership  MEd
Educational Studies  MEd
Reading and Language Arts  MEd
Counseling  MS
Higher Education and Student Affairs Administration  MEd
Interdisciplinary  MEd
Special Education  MEd
Social Work  MSW

College of Engineering and Mathematical Sciences
Biomedical Engineering  MS
Civil and Environmental Engineering  MS
Electrical Engineering  MS
Mechanical Engineering  MS
Computer Science  MS
Biostatistics  MS
Mathematics  MS
Mathematics  MST
Statistics  MS

College of Medicine
Molecular Physiology and Biophysics (Multi-School/College)  MS
Pathology (Multi-School/College)  MS
Pharmacology (Multi-School/College)  MS
Neuroscience (Multi-School/College)  MS
Cell and Molecular Biology (Multi-School/College)  MS

College of Nursing and Health Sciences
Nursing  MS

The Rubenstein School of Environment and Natural Resources
Natural Resources  MS

DOCTORAL DEGREES (22):

College of Agriculture and Life Sciences
Animal, Nutrition and Food Science  PhD
Plant Biology  PhD
Plant and Soil Science  PhD

College of Arts and Sciences
Biology  PhD
Chemistry  PhD
Materials Science (Multi-School/College)  PhD
Psychology PhD

**College of Education and Social Services**
Educational Leadership and Policy Studies Ed.D

**College of Engineering and Mathematical Sciences**
Civil and Environmental Engineering PhD
Computer Science PhD
Electrical Engineering PhD
Mathematical Sciences PhD
Mechanical Engineering PhD

**College of Medicine**
Biochemistry (Multi-School/College) PhD
Cell and Molecular Biology (Multi-School/College) PhD
Medicine MD
Microbiology and Molecular Genetics (Multi-School/College) PhD
Molecular Physiology and Biophysics (Multi-School/College) PhD
Neuroscience (Multi-School/College) PhD
Pharmacology (Multi-School/College) PhD

**College of Nursing and Health Sciences**
Physical Therapy DPT

**The Rubenstein School of Environment and Natural Resources**
Natural Resources PhD
Appendix B

Academic Program Review Inventory

Academic Program Reviews
   Total number of program review clusters = 66*
   (*A cluster is defined by the array of programs covered in a particular set of
   review recommendations.)

Complete through CAC approval = 47 clusters (as of May 8, 2008) [71% complete after
seven academic years]

**Completed within the last year and excluded from the assessment study of
recommendation dispositions (n = 9).

CAS = 26:
History
Physics
Economics
Classics
Philosophy
English/Film
Anthropology
Communication Sciences
Religion
Sociology
Women’s Studies
Music/Music Ed
Art/Art Ed
Romance Languages
Chinese
Japanese
Area and International Studies
Political Science
Theatre
Geology
Psychology
Historic Preservation
ALANA**
Biology/Zoology**
Chemistry**
Geography**
CESS = 7:
Education Programs
Educational Studies
Social Work
Interdisciplinary Studies
HESA
Educational Leadership and Policy Studies
Human Development and Family Studies

CNHS = 5:
Medical Laboratory and Radiation Sciences
Radiation Therapy
Medical Laboratory Science
Nuclear Medicine
Nursing**

CALS = 3:
Botany and Agricultural Biochemistry
Plant and Soil Science
Public Administration

CEMS = 1:
Computer Science

SBA = 1:
Business

COM = 4:
Pathology**
Biochemistry**
Pharmacology**
Molecular Physiology and Biophysics**

Still to Complete = 19 clusters (all excluded from APR assessment study) [29% still to complete after seven academic years]

In Subcommittee = 14

CDAE
Curriculum and Instruction
German and Russian
Rubenstein School
Cell and Molecular Biology
Medicine
Microbiology and Molecular Genetics
Nutrition and Food Science
Mathematics
Statistics
Biostatistics
Engineering
Vermont Studies
Materials Science

To be Assigned = 5

Environmental Studies
Rehabilitation and Movement Science (Physical Therapy)
Ecological Economics and Ecological Design
Biomedical Engineering
Biological Sciences (BISC)

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Not included in total (cancelled or indefinitely postponed for various reasons; status unknown)

Individually Designed Majors (IDMs) -- 3 colleges
Counseling
Animal Science
Environmental Sciences
Anatomy and Neurobiology
Appendix C

Assessment Standards for UVM Academic Program Review

Standard I: The program has a clear and publicly stated purpose that contributes to the mission of the University.

Standard II: The program has qualified faculty and students as well as resources appropriate to accomplish its purposes and strengthen its educational effectiveness.

Standard III: There is demand for the program.

Standard IV: The program provides graduates who contribute to social institutions.

Standard V: The program accomplishes its educational and related purposes.

Standard VI: The program effectively organizes its processes and resources to accomplish its purposes.

Standard VII: The program uses an identified plan for systematic evaluation and assessment of goals and purposes.
Appendix D

Respondents for the Assessment Study of Campus Services, Programs, and Offices

1. Academic Support Programs
2. ALANA Student Center
3. Athletics
4. Budget and Resource Management
5. Campus Planning Services
6. Capital Planning and Management
7. Career Services
8. Cat Card Office
9. Center for Cultural Pluralism
10. Center for Health and Wellbeing
11. Center for Student Ethics and Standards
12. Computing and Information Technology
13. Conference and Event Services
14. Continuing Education
15. Custodial Services
16. Davis Center
17. Dean of Students Office
18. Development and Alumni Relations
19. Dining Services
20. Extension
21. Facilities Design and Construction
22. Federal, State, and Community Relations
23. Fleming Museum
24. General Counsel Office
25. Graduate College Office
26. Human Resource Services
27. Institutional Risk Assessment and Audit Services
28. Instrumentation and Technical Services
29. LGBTQA Services
30. Libraries and Learning Resources
31. Living and Learning Center
32. Office of Affirmative Action/Equal Opportunity
33. Office of Community-University Partnerships and Service Learning
34. Office of International Education
35. Office of Sponsored Programs
36. Physical Plant
37. Police Services
38. Print and Mail Center
39. Procurement Services
40. Radiation Safety Office
41. Registrar’s Office
42. Residence Life
43. Residential Learning Communities
44. Risk Management
45. Student and Community Relations
46. Student Financial Services
47. Student Life
48. Technology Transfer/UVM Ventures
49. Transportation and Parking Services
50. Undergraduate Admissions Office
51. University Communications
52. University Financial Services
53. University Store
54. Women’s Center
Appendix E

About the UVM Assessment Council

Initial Charge: To assist the Provost’s Office with
(a) data collection related to learning outcome assessment within the various schools and colleges.
(b) interpretation of collected data in an effort to understand learning outcome assessment practices at UVM.
(c) the ongoing development and refinement of an institutional assessment approach.

Membership:

OFFICE OF THE PROVOST
ASSESSMENT COUNCIL

Dale Jaffe, Assessment Council Chair
Professor of Sociology and
Associate Provost for Planning and Assessment
Office of the Provost

Fred Curran
Director of Institutional Studies
Office of the Provost

Janet Bossange
Lecturer in Education
Associate Dean
College of Education and Social Services

Kelvin Chu
Associate Professor of Physics
Interim Associate Dean
Honors College

Judy Cohen
Professor of Nursing
College of Nursing and Health Sciences

Mary Cox
Lecturer in Mathematics and Statistics
College of Engineering and Mathematics

Josie Davis
Lecturer in Animal Science
Associate Dean
College of Agriculture and Life Sciences
Joel Goldberg  
Associate Professor of Chemistry  
Associate Dean  
College of Arts and Sciences

Michael Gurdon  
Professor of Management  
Associate Dean  
School of Business Administration

Karen Richardson-Nassif  
Research Associate Professor of Family Medicine  
Associate Dean  
College of Medicine

Margaret Shannon  
Associate Professor  
Associate Dean  
Rubinstein School of Natural Resources