

## MEMORANDUM

**To:** Board of Regents

**From:** Board Office

**Subject:** Annual Governance Report on Academic Program Reviews  
and Student Outcomes Assessment

**Date:** March 6, 2000

### Recommended Actions:

1. Receive the report.
2. Encourage the universities to focus academic program reviews more on curricular changes based on existing resources and to develop better indicators of changes made in programs which directly relate to student outcomes assessment measures.
3. Request that the Board Office meet with appropriate persons at each institution to ensure that the reviews and Student Outcomes Assessments (SOAs) meet Board expectations.

### Executive Summary:

Annually, the Board of Regents receives several reports on the quality assurance efforts of the Regent universities. These efforts include regional and professional accreditation reports, post-audit reports, special reports, program reviews and student outcomes assessment reports.

The Regents' *Procedural Guide* provides that "reports are to be made on an annual basis to provide the Board with more frequent exposure to institutional efforts to improve academic program quality and effectiveness." The Board of Regents' strategic plan calls for each academic program to be assessed at least once every seven years (Strategy 1.1.1.3 and Strategy 1.1.2.1). Academic program reviews are essentially reviews undertaken to improve curriculum and student learning and the reviews are intended to focus on what can be done with existing personnel and resources. The *Procedural Guide* indicates that accreditation reports should be separated from program reviews, although it recognizes that accreditation reports are supplementary to the program reviews. Evidence from a review, i.e., the self-study with necessary modifications, is also used in an accreditation.

This report provides summary information on 31 program reviews, including their student outcomes assessments, undertaken in 1998-1999. These quality assurance efforts represent the implementation of Key Result Area (KRA) 1.0.0.0 of the Board of Regents' Strategic Plan, to become the best public enterprise in the United States. Specifically, this report addresses Objective 1.1.0.0, which is to improve the quality of existing programs.

A list of the 31 program reviews is found on page 18.

During the 1998-1999 academic year, the universities completed 31 program reviews -- 19 at the University of Iowa, four at Iowa State University, and eight at the University of Northern Iowa. According to Board policy, each year the universities are to review between one-seventh and one-fifth of the academic programs. That did not happen this year at Iowa State University, due in part to the transition to a new provost.

This is the third year that Student Outcomes Assessments (SOAs) are an integral part of the academic program reviews. Numerous examples can be found where curriculum changes have been made as a result of student evaluations and, in other cases, of alumni and instructor surveys. At Iowa State University, the Faculty Senate Curriculum Committee has asked that intended learning outcomes identified through this process be placed in the next catalog so that students and others will know what is expected from each program. This attempt at informing students of program expectations is an excellent use of outcomes information.

In general, the reviews have accomplished what was intended but the Board Office has several major concerns. First, despite instructions that academic program reviews should not be resource oriented (e.g., information about adding new faculty, obtaining new technological equipment, building new or remodeling facilities), the main focus in institutional reports is often on new resources, not curriculum revision. This tendency can sometimes be overcome by an appropriate orientation of the reviewers by the Dean or Provost prior to the initiation of the site visit. A second concern relates to the use of a single outside reviewer. Nationally, those who have analyzed the use of outside reviewers recommend that two or three persons be used to give better balance and additional perspectives. That recommendation was emphasized last year, but a number of the programs reviewed this past year had only one outside reviewer. A third concern, especially in the case of the University of Northern Iowa, and to a lesser extent, with the University of Iowa, is the "disconnect" of student outcomes assessment with the program review. All too frequently, changes in programs were attributed to faculty discussions and decisions that either supported or disagreed with the external reviewers. In many cases, the student outcomes assessment simply stated that course evaluations were ongoing.

**Background:**

Academic program review and professional accreditation reports are two complementary aspects of the Board's quality assurance efforts. An academic program review is essentially based on assessment of a program's strengths and weaknesses, and typically results in modifications of curriculum and personnel changes (adding or reducing faculty or staff). Academic program reviews should go beyond minimum standards and assess the desired level of quality at the institution. A professional accreditation report is essentially based on a unit's compliance with minimum standards set by a professional organization.

While some variations exist at the three universities -- each university includes a copy of its review process in its report -- the typical academic program review consists of these major steps:

- The review begins with the program or department performing a comprehensive self-study which should identify the strengths and weaknesses of a program based on university guidelines and is prepared by the unit's faculty.
- Usually, a panel of external peers from the field or discipline reviews the self-study and makes a campus visit. In several of the current reviews, only one external reviewer was used. More typically, two or three outside reviewers are used in comprehensive program reviews. The external reviewer(s) prepare a report of the findings and recommendations for consideration by the appropriate university entity.
- The dean(s) and Provost review all documents, meet with the program faculty, and create with the faculty an implementation plan for the program that builds on strengths, corrects weaknesses, and sets strategic goals and objectives for the program.

Each university has created a master calendar for academic program reviews; these are contained in their reports. The master calendar may be adjusted to enable programs to perform accreditation and program reviews concurrently. See Attachment A, pages 19-33, at the end of this report for scheduled program reviews for the University of Iowa. See Attachment B, pages 34-45, for Iowa State University's schedule of program reviews. The University of Northern Iowa's proposed schedule for academic program reviews is found in Attachment C, pages 46-47.

During 1998-1999, the universities reported 31 completed academic program reviews. The University of Iowa reported reviews on 19 programs, departments, divisions, and colleges. Iowa State University reported on four programs, and the University of Northern Iowa completed eight program reviews.

The inclusion of SOA material is handled differently by each university. The University of Iowa's report contains brief references in the narrative when student outcomes made a specific impact upon the curriculum. Student outcomes assessment constitute the final section of the report and provide more detail, but this section is not particularly insightful regarding the links between the outcomes and curricular changes. Iowa State University's program reviews include an excellent use of student outcomes assessment results. At ISU, the SOA section begins with a "profile" of what a graduate is expected to know and be able to do. Specific objectives based on the profile are then developed. Typically, the discussion on SOAs at ISU then refers to data collected from specific instruments, such as course evaluations or interviews of seniors. The ISU process concludes, for example, with specific ways in which courses, advising procedures, and intern experiences may have changed as a result of the SOAs. The student outcomes assessment section in the University of Northern Iowa's report typically consists of only a few sentences for each program. The information provided by UNI rarely links what has been learned from the SOAs with subsequent or planned changes.

In this particular area, the institutional differences present inconsistencies and suggest that changes are needed for utilization of SOAs.

The remainder of this memorandum highlights the university reports, including the academic program reviews and student outcomes assessment.

The institutional reports will be kept on file in the Board Office.

### **The University of Iowa**

The University of Iowa report begins with a helpful summary of academic program and accreditation reviews occurring in each college. The report concludes with a thorough outline of its review process for the next seven years.

In 1998-1999, SUI completed the academic program reviews cited below. A brief description of each program, focusing on selected actions taken as a result of the findings and recommendations, is provided.

### **College of Dentistry –**

**Department of Pedodontics.** Vacant faculty positions have been filled by persons who are highly skilled clinicians. They are able to provide residents with experience in the latest surgical methods. Furthermore, department faculty members are collaborating with the newly developed Office of Clinical Research to conduct clinical trials for industrial clients.

*Student Outcomes Assessment: For the past seven years, College of Dentistry students have scored above the national average on the*

*Periodontics component of Part II of the National Board examination. (Scores from 1992-1998 are shown in the report.)*

**Department of Preventive and Community Dentistry.** The Department Executive Officer (DEO) has met with the Dean of the College of Public Health to explore joint appointments and program collaboration. The department is working with Clinic Administration to develop mechanisms to provide appropriate preventive patient opportunities for dental and dental hygiene students. A faculty goal in another program is to seek to coordinate preventive education for dental students.

*Student Outcomes Assessment: For the past seven years, College of Dentistry students have scored above the national average on the Behavioral Science and Dental Public Health components of Part II of the National Board examination. Results are shown for 1992-1998.*

### **College of Education –**

**Collegiate Review.** The review by the Office of the Provost, which included external consultants, concluded that the College stands at a crossroads, with some problems of organization and infrastructure, yet having many new opportunities to build upon its excellent reputation. The Review Committee submitted eight broad recommendations:

- 1) strengthen divisional coherence and governance;
- 2) continue to assess the importance of individual graduate degree programs and consider selective reduction in the number of programs;
- 3) enhance undergraduate education by increasing the connection between teaching and scholarly efforts;
- 4) determine college-wide priorities for space assignment and initiate plans to remedy deficiencies;
- 5) strengthen the collegiate research endeavor by increasing efforts to acquire new external sources of support;
- 6) increase efforts to publicize the accomplishments and activities in the College;
- 7) improve internal communication among faculty and between students and faculty;
- 8) continue efforts to increase the diversity of faculty, staff, and students, and to create a welcoming environment for people of diverse backgrounds.

*Student Outcomes Assessment: Representatives from the College attended Department of Education workshops to help prepare faculty to convert the 107 practitioner preparation licensure endorsements from course-based to performance-based programs. Further, the Office of Student Services of the College of Education is redesigning a student*

*response questionnaire that all graduate teacher licensure/endorsement applicants will complete when they apply for a license/endorsement. The College is also updating and improving other assessment procedures such as student portfolios and electronic portfolios. Comments are also found in the report regarding specific programs (pp. 57-60). Additional information is gained during student teaching and other data obtained through the Education Placement Office.*

**Division of Counseling, Rehabilitation, and Student Development.** In Fall 1999, this division successfully responded to have all conditions removed in a recent accreditation by CACREP. A second accreditation was also received by the Division from the Council on Rehabilitation Education (CORE). This extensive external monitoring as well as internal review has been used to strengthen the programs of the division.

*Student Outcomes Assessment: See College of Education statement.*

**Division of Psychological and Quantitative Foundations.** The report on this division cited internal reviews completed in 1994-95 and 1995-96, noting that updates and monitoring of progress are currently underway. This report contained no specifics on actions taken as a result of the program reviews, except to say the division was preparing for another accreditation review.

*Student Outcomes Assessment: See College of Education statement.*

**Division of Planning, Policy, and Leadership Studies.** References were made to internal reviews and external reviews (1995 and 1996). As a result, there has been a new division-wide focus on educational policy studies since 1997. There is more emphasis now on annual monitoring and strategic planning.

*Student Outcomes Assessment: See College of Education statement.*

**Division of Curriculum and Instruction.** The report states that large-scale changes in the Elementary Education Program and the Science Education Program, made in 1996 following external reviews, could not be reported until now. However, additional changes in personnel will result in even more changes, grounded in the new strategic plan. No specific details are provided.

*Student Outcomes Assessment: See College of Education statement.*

**Licensure Programs (Iowa Department of Education).** The Board received a report from the Department of Education's review of the College of Education's licensure programs last month. The academic

program review is brief, stating that the Deans of the Graduate College and the College of Education will monitor implementation of all strategic plans and review recommendations.

*Student Outcomes Assessment: See College of Education statement.*

### **College of Engineering –**

**Collegiate Review.** The Office of the Provost instituted a collegiate review of the College of Engineering during the 1996-97 academic year. That review overlapped with an accreditation review by the Accreditation Board for Engineering and Technology (ABET), which was scheduled for 1997. With the appointment of a new dean in December 1999, the College can address the recommendations of the review. [One recommendation relevant to this report is that the College does not currently have a student outcomes assessment plan in place.]

### **College of Liberal Arts –**

**Department of Biological Sciences.** The department completed a revision of the first-year graduate program and strengthened its graduate student recruitment efforts. The reviewers commended the department for its contributions to interdisciplinary graduate programs, particularly in the areas of neuroscience and genetics. It also received praise for a faculty mentoring program.

*Student Outcomes Assessment: Page 63 of the SUI Academic Program Review report describes extensive departmental efforts such as a senior survey, equalizing the requirements for its B.A. and B.S. programs, increasing elective courses, and introducing a new intensive laboratory course in cell biology.*

**Department of Geoscience.** To maintain its strength, the department must replace retiring faculty. A search in paleontology is underway and the department has also developed a new position for a computer consultant to serve Geoscience, Chemistry, and Social Work. The report of this committee emphasized several other new hires, as well as its name change from the former Department of Geology to Geoscience.

*Student Outcomes Assessment: Surveys were completed by graduating seniors. As a result, course content has been changed, and computers and laboratory equipment upgraded. Also, access to courses in optical mineralogy and geophysics were improved.*

**School of Music.** The report emphasized faculty searches (six had been conducted). It identified the Center for New Music as a “flagship” program. The School believes that it needs funds to begin to address serious needs for renewal of musical instruments.

*Student Outcomes Assessment: The degrees offered by the School are “performance oriented.” Student outcomes assessment is conducted by lower-level and upper-level juries. In addition, students must have the instructor's approval to enroll in upper-level applied lessons. Job placement is also an outcomes measure. The last self-study reported that more than 90% of the undergraduate and graduate students who registered with the University's Educational Placement Office in 1996-97 earned placements in teaching. As part of the reaccreditation review completed in 1999, the School added a requirement for a course in music repertory and history. Another change is that music education students now take Performance and Pedagogy Seminars.*

### **College of Medicine –**

**Collegiate Review.** The Office of the Provost conducts periodic reviews of the University's collegiate units. The review of the College of Medicine began in 1997 and concluded in 1999. The review concluded that significant strides had been made since the last review in 1989. Achievements include: the new medical education curriculum, the recruitment of ten new departmental executive officers (DEOs), and the recruitment of several outstanding new faculty members in both the clinical and basic science programs. Sponsored research and private fundraising efforts have also been highly successful. The College, however, continues to face significant physical space constraints. There is a good partnership between the University of Iowa Hospitals and Clinics and the College of Medicine. The issue of health care financing has placed extraordinary pressures on the medical college faculty, and resulted in morale problems. Surveys of students reveal satisfaction for the quality of faculty teaching and the new curriculum. An area to be addressed is how interdisciplinary activities can be increased.

*Student Outcomes Assessment: In the College of Medicine, outcome assessment is provided in the form of results on national pre-licensure examinations. Results for medical students, physician assistant students and physical therapy students are included. The examinations are broad-based, covering the entire curricula for the various student groups. Pass rates for several programs are provided on page 66 of SUI's report. For first time takers from the Class of 1999, all 169 students taking the U.S. Medical Licensing Examination passed (100%). For first time takers from the Class of 2000, all 158 students from SUI passed (100%). The pass rates for SUI students taking the Physical Therapy licensure exam*

*during the past four years, the pass rate per year has ranged from 94.3 percent to 100 percent.*

**Department of Family Medicine.** A review committee found the department's education programs to be a strength. An external consultant and an ad hoc internal committee had similar recommendations for strengthening some aspects of the program. A new department head was to be appointed at the time of the review. Strategic planning was suggested.

*Student Outcomes Assessment: See comments for the College of Medicine. No specific information provided by the department.*

**Department of Neurology.** The College has made a major commitment to the department to further develop neuroscience research. The department will strengthen its management and education programs, including the appointment of a senior faculty member to oversee clinical operations.

*Student Outcomes Assessment: See College of Medicine statement.*

**Department of Ophthalmology and Visual Sciences.** This department has a very high national ranking and changes are expected to be minimal. Some of the recommendations of a review committee included improvement of a new required third year medical student clerkship and a re-examination of the department's practice plan.

*Student Outcomes Assessment: See College of Medicine statement.*

**Department of Orthopaedic Surgery.** Most of the changes described in the department's report involved faculty recruitment and renovation of the research laboratories. Based on the review, one recommendation was made to expand the department's research in cellular and molecular biology.

*Student Outcomes Assessment: See College of Medicine statement.*

**Physician Assistant Program.** The report discussed faculty replacements in light of retirements, as well as the search for a new director of the program. Some concern was raised about coverage in the basic science courses.

*Student Outcomes Assessment: One hundred percent of the 23 students taking the National Certification Examination in October 1999 passed.*

## **College of Nursing –**

**CCNE Accreditation Review.** An accreditation visit was held in March 1999; a self-study was prepared for that visit. As reported to the Board recently, the Commission on Collegiate Nursing Education (CCNE) did grant accreditation to the College of Nursing for ten years, extending to 2009. In actions being taken related to academic program review, the College is evaluating the provision of student services at distance education learning sites. Recruitment of faculty who are proficient in the area of advanced practice is a priority.

*Student Outcomes Assessment: The College of Nursing uses CCNE standards for student assessment, which include collecting evidence that students can demonstrate accomplishments in the areas of liberal education, professional values, core competencies, core knowledge (health promotion, risk reduction, and disease diversity; global health care; health care systems and policy), and role development (e.g., provider of care; designer/manager/coordinator of care; member of a profession). Faculty ratings of clinical performance, classroom exams, and skills laboratory tests are other instruments used. The College is appointing a task force to establish a revised master plan for evaluation of student outcomes as well as all program curricula.*

## **Division of Student Services: University Counseling Service –**

**Predoctoral Internship in Professional Psychology.** This review is still in process. The results will be reported in the 1999-2000 report.

*Student Outcomes Assessment: Outcomes information on interns is gathered from the students and staff. The degree programs of the candidates of this one-year internship require a satisfactory completion of a supervised psychological-counseling internship at an APA-accredited site. Another outcomes measure is job placement; that rate is very high. Also, graduates have been actively involved in the profession and seven of fifteen former interns have authored or co-authored papers at professional meetings.*

## **Iowa State University**

The ISU report provides extensive background materials. It is notable that each program begins with a "profile" of the graduates of its programs. This helps focus the student outcomes assessment as to the knowledge, skills, and professional dispositions which are sought.

### **Chemistry Department --**

The external review was highly favorable, in areas such as evaluation of faculty quality, research productivity, departmental leadership, curriculum, and departmental internal organization. The report noted that the department is currently ranked thirteenth among public universities; however, its position is declining. Factors contributing to the decline were quality of space in Gilman Hall, faculty understanding, and recruitment of domestic graduate students. The need to remodel laboratories is crucial. The University has recognized the need to remodel Gilman Hall, and funding efforts are being made for additional faculty lines and increased support for graduate students. Another recommendation from the external review was that recitations for undergraduate courses beyond the first year chemistry course be developed, especially the introductory organic chemistry course. A proposal has been forwarded to the Provost's office.

*Student Outcomes Assessment: A non-credit freshman chemistry course was changed to a credit course, following an analysis of grade distributions in the course, Chemistry 50, over the past four years. Another change was the implementation of a requirement to write formal research papers in Chemistry 399 and 499. The department also introduced the state-of-the-art technologies as teaching tools, and has begun conducting exit interviews of chemistry majors. As a result of those interviews and course evaluations, some experiments were dropped and others added in laser chemistry and fluorimetry.*

### **English Department --**

An external review in April 1999 resulted in 65 recommendations. As a result of reviewing the proposals, the department developed a list of six recommendations they would like to implement as soon as possible. They include: (1) drafting and implementing a three-year development plan; (2) locating funding to support a full-time graduate assistant; (3) beginning revision of the undergraduate English major; (4) lowering the class size in all composition courses and break-out sections of SpCm 212; (5) discussing options for establishing a Master of Arts in Teaching for students with baccalaureate degrees without teacher certification; and (6) seeking ways to fund the English 101 program to allow for a stable administrative structure.

*Student Outcomes Assessment: In addition to using samples of student writing, the department uses multiple methods of assessment. An alumni questionnaire and a senior exit questionnaire are now used. At the graduate level, student outcomes were part of the decision to modify the program of study in the English M.A. In fall 1999 the department conducted a survey of placement and publications of recent M.A. graduates in Rhetoric, Composition, and Professional Communication and Ph.D. graduates in Rhetoric and Professional Communications.*

### **Horticultural Department --**

The department used a unique format for its program review. Following the external review, the faculty and administration developed 11 key issues for further study. Some related to undergraduate education, others to graduate education. One centered on external factors such as the increased interest in horticulture from urban and suburban clientele. Another focused on distance education questions. With each issue, the external reviewers' comments were listed, followed by faculty responses, and then a series of strategies and options were identified. Generally speaking, the undergraduate offerings were strengthened, faculty research and service activities promoted, and strategic planning efforts increased.

*Student Outcomes Assessment: Page D-5 of the ISU Academic Program Review summarizes how academic performance will be evaluated, how attainment of general education goals will be measured, and how follow-up with graduates will be implemented. As a result of assessment efforts, several major curriculum changes have been made. Several new options have been developed, including Environmental Horticulture, Floriculture/Greenhouse, Fruit/Vegetable, and Turfgrass Management.*

### **Statistics Department --**

The Department of Statistics at ISU has, for many years, been recognized nationally for its excellence in research and training in applied statistics. It works closely with many programs on campus, teaching a number of introductory courses. Seven recommendations were made by an external review team (found on page D-58 of the ISU report). Increased distance education and strategic planning were two of the areas under exploration.

*Student Outcomes Assessment: An article by Richard A. Groeneveld and W. Robert Stephenson, "Outcomes Assessment in the B.S. Statistics Program at Iowa State University," was recently published in Assessment Practices in Undergraduate Mathematics. It contains many examples of changes in the curriculum made as a result of the assessment of students.*

## **University of Northern Iowa**

The instructions for doing a program review at UNI asks that attention be given to relationship to the missions of the College and University, curriculum, students, faculty/staff, facilities and resources, budget and finance, and student outcomes assessment. A summary, with program highlights, is also requested.

The academic program reviews for UNI completed in 1998-1999 include:

### **College of Business Administration --**

**Finance Department.** The summary of recommendations accepted by the department following an external review and actions taken to date are the following: (1) the climate in the department must be improved [the College and University administration are assisting that effort]; (2) a department head must be appointed [that has been done]; (3) improvement of the introductory finance course [an ad hoc committee is working on refining the course]; additionally, the Center for the Enhancement of Teaching has assisted with development of resources; (4) the expansion of the CPA program; [the Real Estate Emphasis is scheduled to become a major in Fall 2000]; (5) development of a computer laboratory equipped with the latest financial information technology [currently gathering funds]; and (6) hire another faculty member in the mainstream finance area [no action taken to date].

*Student Outcomes Assessment: Learning outcome objectives have been defined for all core courses. Assessment measures and continuous improvement mechanisms are being implemented.*

### **College of Education --**

**Communication and Training Technology Program.** The purpose of this program is to train corporate and non-educational employees on technology relevant to their employment. At present, the external reviewer perceived the program as an "add-on" to the Educational Technology Masters Program. Pursuant to the recommendations of the external reviewer, the College has taken the following actions: (1) increasing numbers of contacts with the corporate community; (2) reviewing the courses and curriculum of two related Masters' programs, which have resulted in increasing the number of internships and practica within non-educational settings; (3) hiring a new faculty member [no action taken]; (4) changing the name of one of the programs so that it will not have the word "communications" in its title; (5) adding to a course the assignment of developing a career portfolio.

*Student Outcomes Assessment: An outcomes assessment plan with progress measures has been developed and implemented by the department.*

*As a result of student feedback, increased emphasis has been placed on professional preparation for non-K-12 settings.*

**Educational Technology Program.** This program provides service to the undergraduate teacher education programs by providing the Educational Media and Educational Media and Classroom Computing courses. At the Master's level, the program is used by many practicing teachers who have a desire to improve their knowledge and skills in integrating technology into the learning process. The external reviewer offered 18 recommendations. At present, a number are in process of being implemented. Selected examples include: (1) the members of the division are developing a strategic plan; (2) the faculty has made curricular changes for the next cycle, beginning in Fall 2000; (3) Dr. Vietz will work on the development of three levels of certification for teachers; (4) the faculty is developing pre-service teacher technology competencies; and (5) Continuing Education personnel have worked with the division to provide some ease to access courses offered through Continuing Education.

*Student Outcomes Assessment: As a result of the self-study and the external review, the SOA process has been refined. Student portfolios are being used more extensively. An on-line survey of recent graduates has been conducted.*

**School Library Media Studies Program.** The external reviewer made several recommendations related to hiring new faculty. Another recommendation by the external reviewer related to increasing curriculum integration of computer technology. This has been done. The reviewer also suggested that the curriculum be analyzed for the purpose of revising courses to be taught on-line. The program has converted an introductory course to a modular approach. The self-study concluded that the program ought to assume more responsibility for advocacy of the role of the school librarian in Iowa. The external reviewer added that the program should engage in more strategic planning.

*Student Outcomes Assessment: The Division in which this program resides has already moved towards performance outcomes. A final program portfolio has replaced the requirement for a comprehensive examination. Some other student assignments (writing as well as production of a videotape) provide feedback to the faculty about program changes which are needed.*

**College of Natural Sciences -- (B.A. and M.A. in Science are counted as one review)**

**B.A. in Science.** Relatively few faculty and administrators expressed support for this major. The recommendation coming from the program review is that the B.A. in Science be eliminated at UNI because it lacks academic oversight, does not have academic rigor, lacks faculty support, and does not serve its graduates well (as a career choice). The recommendation to delete this major has been presented to the College of National Sciences Senate and University Senate. Both groups supported the recommendation.

The B.A. in Science with an Environmental Planning Emphasis, following the review, had some support, but only if it could be placed in either the Earth Science Department or the Geography Department. These two departments have shown no interest in taking this program.

**M.A. in Science.** The M.A. in Science major is typically pursued by non-traditional students, many of whom have personal or job-related reasons for pursuing such a degree. Following the review of this program, it was recommended that the major be dropped. The College of National Sciences Senate and University Senate accepted this recommendation.

**Science Education.** This program is considered a very strong program, with excellent students and strong content. A series of recommendations dealing with quality, centrality, demand, and cost were made. Selected recommendations acted upon include: developing a Math/Science cohort to better serve science teaching majors; increasing undergraduate research; adding courses and sections so that Master's students may complete their programs in a timely and sequential manner; increase collaboration between Science Education faculty and faculty in Physics and Chemistry.

*Student Outcomes Assessment: The new chair and secretary have given time to developing a database of current students and alumni.*

**Environmental Science and Technology.** Environmental Programs is an administrative unit within the College of Natural Sciences (CNS) that directs two interdisciplinary graduate (M.S.) degrees entitled "Environmental Science" and "Environmental Technology," as well as an undergraduate minor entitled "Environmental Studies." The interdisciplinary graduate programs are the focus of the review. The external reviewers offered six recommendations accepted by the program which are in the process of being addressed. The first recommendation was to find ways for the program faculty to receive more released time in support of research and proposal writing. Increased collaboration was another recommendation. A third recommendation, based in part on student requests, has resulted in more coursework in the area of Environmental Regulation and Permitting. Another

recommendation suggests that new courses be offered as part of the Environmental Health Initiative. Yet another recommendation was that graduate students be provided more teaching opportunities.

*Student Outcomes Assessment: The surveys used with students in these interdisciplinary programs has given some feedback. Nothing more specific was mentioned in the UNI report.*

## **College of Social and Behavioral Sciences --**

**Psychology.** The recommendations of external reviewers accepted by the program and on which action has been initiated include: designating senior level courses as "capstone" courses; placing increased emphasis upon early advising and career counseling; reducing class size (dependent upon hiring additional faculty), offering research courses earlier, developing long-range plans, and increasing interaction with the department, both formal and informal.

*Student Outcomes Assessment: The report noted that the SOA process was under continual revision. Few specifics were mentioned in this department's report, although the department noted that special attention will be given to students' attitudes about statistics, and their view of psychology as being less scientific than "hard" sciences.*

### **Analysis:**

The academic program review process is a well-established practice that assists the universities and the Board of Regents in meeting objectives of their strategic plans. This on-going process continues to result in strengthening programs through curriculum revisions and budget reallocations, as well as offering creative ways (such as merging departments or programs) to redirect less strong programs.

Student outcomes assessment is proving to be a valuable tool to determine changes in the curriculum to enhance student learning. Last year's governance report indicated that the integration of student outcomes assessment into the program review process would occur incrementally. The Board Office believes the universities should be commended for their continued progress on this large task. In next year's report, however, the Board Office suggests that (1) more complete references to the impact of the student outcomes assessment be made directly in the program review narratives; (2) that program review faculty and staff, and especially those responsible for reviews, be advised and prepared to analyze the program and make recommendations with a "no new resources" outlook; and (3) that external reviewers be increased to more than one person.

The reason for the first recommendation is that too frequently there is not a sufficient connection between the student outcomes assessment and changes in the curriculum. The primary reason for the second recommendation is that the "philosophy" of a program review is to assume there will be no new resources. The reason for the third recommendation is that a single external reviewer frequently brings one perspective, or represents one "school of thought."

A number of program reviews discussed the department's or unit's potential involvement with distance education. Selected programs indicated that faculty and staff had been involved with strategic planning. For these reasons, the Board Office believes that meetings with institutional representatives should occur periodically.

Attachments A, B, and C are the schedules of program reviews for the next seven years for the three universities..

\_\_\_\_\_  
Charles R. Kniker

Approved: \_\_\_\_\_  
Frank J. Stork

**Academic Program Reviews at Regent Universities  
1998-1999**

**University of Iowa**

College of Dentistry --  
**Department of Pedodontics**  
**Department of Preventive and Community Dentistry**

College of Education --  
**Collegiate Review**  
**Division of Counseling, Rehabilitation, and Student Development**  
**Division of Psychological and Quantitative Foundations**  
**Division of Planning, Policy, and Leadership Studies**  
**Division of Curriculum and Instruction**  
**Licensure Programs (Iowa Department of Education)**

College of Engineering --  
**Collegiate Review**

College of Liberal Arts  
**Department of Biological Sciences**  
**Department of Geoscience**  
**School of Music**

College of Medicine --  
**Collegiate Review**  
**Department of Family Medicine**  
**Department of Neurology**  
**Department of Ophthalmology and Visual Sciences**  
**Department of Orthopaedic Surgery**  
**Physician Assistant Program**

College of Nursing  
**CCNE Accreditation Review**

Division of Student Services: University Counseling Service  
**Predoctoral Internship in Professional Psychology**

**Iowa State University**

**Chemistry Department**  
**English Department**  
**Horticultural Department**  
**Statistics Department**

**University of Northern Iowa**

College of Business Administration --  
**Finance Department**

College of Education --  
**Communication and Training Technology Program**  
**Technology Education Program**  
**School Library Media Studies Program**

College of Natural Sciences --  
**Science**  
**Science Education**  
**Environmental Science and Technology**

College of Social and Behavioral Sciences  
**Psychology**