

MEMORANDUM

To: Board of Regents
From: Board Office
Subject: Programmatic Re-accreditation Reports at Iowa State University
Date: September 8, 2003

Recommended Action: Receive the following accreditation reports:

- * Bachelor in Landscape Architecture
- * Veterinary Diagnostic Laboratory
- * Bachelor of Science in Industrial Technology – Manufacturing and Industrial Safety

Link to Strategic Plan: The reports address the following Key Result Areas (KRAs) in the Board's current Strategic Plan:

KRA 1.0.0.0	Become the best public education enterprise in the United States.
Action Step 1.1.3.2	Report data in the relevant governance reports and presentations to the Board.
KRA 4.0.0.0	Meet the objectives of the Board and institutional strategic plans and provide effective stewardship of the institutions' state, federal, and private resources.

Executive Summary: Each program contained in this report: (1) underwent a self-study that addressed the criteria defined by its accrediting agency, and (2) had an on-site visit by peer evaluators. All programs were accredited for the full period allowed by the respective accrediting agencies.

Where required, the program responded to the recommendations identified during the on-site visit. The departments' responses to the teams' recommendations are provided in italics in the following pages.

Bachelor in Landscape Architecture

Program Description The Bachelor of Landscape Architecture (BLA) is a five-year undergraduate program. The program is divided into two parts – a one-year, pre-professional segment and a four-year, professional segment. As a result of enrollment management policies defined by national accreditation standards, the number of spaces in the professional program is limited each year.

Accrediting Agency The Landscape Architectural Accreditation Board (LAAB) of the American Society of Landscape Architects (ASLA) is the accrediting agency for first-professional programs in landscape architecture in the United States.

On-Site Visit Team Report The on-site visit by peer evaluators occurred in September 2002. The team report addressed the 11 accreditation standards¹ that apply to the bachelor's program. The report indicated that all of the standards were met, although Standard 3 was met with weakness.

Recommendation Affecting Accreditation There was only one recommendation affecting accreditation that must be addressed in annual reports to the accrediting agency.

- “Continue to refine and monitor the new curriculum as it is implemented (Standard 3)”. *The 4th year of the new undergraduate curriculum was implemented during AY 2003; the full introduction of the 5-year curriculum will be completed in AY 2004. Through the continued development of student outcomes and the coordination of studio instruction with related construction technology courses, the faculty intend to enrich and expand students’ design experience and to integrate construction technology and design implementation into the design studio experience.*

In AY 2004, the department will add a second faculty position with a focus on technology and design implementation. An extended 7-12 month internship is a significant component of the new curriculum. The extended internship provides more opportunity for students to integrate design and technology with an “on the ground”

¹ 1 – Program Mission and Objectives
2 – Governance/Administration
3 – Professional Curriculum
4 – Bachelor's Level
6 – Faculty and Other Instructional Personnel
7 – Students
8 – Alumni
9 – Practitioners
10 – Relation to the University, the Community and the Profession
11 – Facilities and Equipment
12 - Library

understanding of how landscapes are constructed. Initial review of the first class to complete the internship indicates significantly increased knowledge in the construction technology area.

Since the team visit, the department has endeavored to notify students of their acceptance into the professional program in a timely manner, to complete the student outcomes assessment for the entire curriculum, and to extend the integration of computers into the curriculum. First-year student portfolios, essays, and applications were submitted in May; the review and notification were completed by mid-June. Faculty working groups completed the development of both course-based and learning areas-based student outcomes. While computer use is standard policy in Computer Aided Design (CAD) and Geographic Information System (GIS) focused courses, computer visualization technology was used for the first time in two additional studios and expanded in three other studios. Currently, three class years of students are participating in the laptop lease plan. Two class years have 100% owned or leased laptop computers for use in all aspects of the curriculum.

Suggestions for
Improvement
Identified
by the Team

The program is at liberty to consider any of the following suggestions for improvement.

- “Prepare advising materials that clearly guide students through the curriculum (Standard 1).”
- “Develop materials that estimate the cost and time commitments for students so that they can plan their financial support accordingly (Standard 1).”
- “Seek ways to increase students’ opportunities to interact with students in other departments in the College (Standard 1).”
- “Clarify the requirement for students to purchase laptop computers (Standard 1).”
- “Provide students with timely and consistent notification of professional program admission status at the end of the pre-professional year (Standard 3).”
- “Execute the Student Outcomes Assessment (SOA) plan for all sections of the new curriculum (Standard 3).”
- “Further integrate the use of computers into the curriculum, where appropriate (Standard 3).”
- “Continue to work with other departments and the College to coordinate course offerings with student schedules to provide full advantage of elective opportunities (Standard 4).”
- “Clarify the role and policies for adjunct and part-time faculty (Standard 6).”

- “Continue efforts to increase ethnic and racial diversity (Standard 6).”
 - “Invigorate efforts to attract less represented students (Standard 7).”
 - “Make every effort to keep students informed of their academic requirements and options, particularly during this period of introducing curriculum transition (Standard 7).”
 - “Inform students as early as practical concerning their acceptance into the L.A. program (Standard 7).”
 - “The issues of academic and private sector collaboration and conflict of interest present a rich opportunity for a professional practice forum on the role of professional education, the future of the profession and how each can better interact with the other for mutual growth and benefit of the profession (Standard 9).”
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Sample
Strengths
Identified
by the Team

- “The curriculum content provides instruction in all areas expected in the professional program content.”
 - “The pre-professional design studios are providing a creative and strong design foundation.”
 - “The second year Savanna Studio is a very unique immersion program that uses the tall grass region of North America as its studio, and may become a signature approach to developing a regional design context.”
 - “The summer abroad urban design studios provide third and fourth year students important opportunities for academic and personal exposure and growth.”
 - “The Student Outcomes Assessment (SOA) plan is a strong and exemplary tool for systematic evaluation of course and program effectiveness.”
 - “The Program and College are enriched by the Landscape Architecture’s faculty teaching special Landscape Architecture electives tied to their research interests.”
 - “Alumni input into program evaluation is provided through an active Practitioner’s Advisory Council (PAC) that is made up of a cross-section of alumni and non-alumni from across the country, representing both private and public.”
 - “Alumni contribute to the program as visiting reviewers and lecturers and financial endowments to support student scholarships.”
 - “The Community Visioning program is an exemplary model of academic and private sector collaboration that directly benefits numerous communities in Iowa, the students, and the profession.”
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Concerns Identified by the Team

- “The concept of integrating the instruction of construction technology and design implementation into the design studios is a creative and ambitious approach that this faculty has the enthusiasm and skill to achieve. However, observation of the student work in the transition to the new curriculum, particularly at the third year level, exhibits some weakness and inconsistencies in the construction technology and design implementation proficiency of the work.”
- “Some practitioners voiced concern that student-staffed research projects were competing with private practice and that the ‘college is becoming a practice’.”

Accreditation Status

The Landscape Architectural Association Board granted accreditation to ISU’s Bachelor of Landscape Architecture program for a six-year period subject to review of annual reports and maintenance of good standing. The program is next scheduled for a review during Spring 2008.

Veterinary Diagnostic Laboratory

Program Description

The mission of the Veterinary Diagnostic Laboratory (VDL) is “to promote healthy livestock, performance animals, and companion animals and to ensure safe animal products for the consumer by assisting veterinarians, their clients, and others responsible for animal health by providing accessible, accountable, timely, and accurate diagnostic services.”

Accrediting Agency

The American Association of Veterinary Laboratory Diagnosticians (AAVLD) is the accrediting agency for veterinary diagnostic laboratories.

On-Site Visit Team Report

The on-site visit by peer evaluators occurred in September 2002. The team report addressed all of the essential requirements for accredited veterinary diagnostic laboratories defined by AAVLD.

Sample Strengths Identified by the Team

- Professional development opportunities for faculty and staff;
- Full information systems service that is well thought out, staffed, and managed;
- Quality of the reports and turnaround time on cases by the Pathology section;
- Admirable accomplishment by the Virology section in development of molecular diagnostics;
- Good laboratory practice training and certification by the Serology section;

- Impressive equipment in the Molecular Diagnostics section;
 - Well-staffed racing laboratory with appropriately trained individuals;
 - Significant improvements made by the VDL for enhanced space and implementation of new technology; approach to diagnostic service and responsiveness to new issues by the laboratory.
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Suggestions
for Improvement
Identified by
the Team

- “Establish an industry advisory group.” *VDL expects to have this group in place before the end of 2003.*
- “Continually improve on quality assurance programs.” *A quality assurance officer was hired in May 2002 to assist laboratory sections to more fully develop standard operating procedures. The quality assurance officer will develop a comprehensive outline for quality assurance development and a standard operating procedure format for use by the laboratories as a guideline for writing individual standard operating procedures.*
- “Improve the process for handling large animals that must be euthanized.” *This concern will be addressed by the completion of a new biosecurity wing for the VDL that is under construction.*
- “Reduce the number of minor laboratory safety infractions (e.g., placing packages on top of refrigerators or eating lunch inside the lab).” *The need to flush eyewash stations regularly and to prevent storage of boxes on refrigerator tops has been addressed. Compliance will be monitored by regular inspections. The Laboratory Safety Committee, which includes two persons from every lab section, is responsible for providing safety evaluations and using the resources of the Environmental Health and Safety Guidelines to interpret and/or correct violations.*
- “Develop standard operating practices for tracking samples more efficiently.” *The quality assurance officer will assist in developing a comprehensive tracking procedure for samples that travel throughout the laboratory. The development of a bar coding system with a coded label applied to documents received from clients has recently been initiated. The laboratory computer system is now capable of auditing all transactions and entries of information. A small HEPA filtered laminar flow biosafety hood has been installed in the necropsy area where suspicious packages or samples can be examined. A new six-foot Class II biosafety cabinet will be installed when the VDL biosecurity addition is completed. The biosecurity renovations will include a new mailroom with two integral biosafety cabinets that can be used for routine inspection of packages or specimens prior to being sampled.*
- “Document the standard operating practices in the Bacteriology section.” *The bacteriology faculty will include documentation of sample receipt and identification as part of their routine procedures.*

- “Change the VDL reporting line directly to the Dean with the VDL director responsible for all VDL resources (including personnel and budget).” *When the Department of Veterinary Diagnostic and Production Animal Medicine (VDPAM) was created in 1997, the department chair assumed supervisory responsibility for the VDL director. Changes have occurred over time. In August 2003, the VDL director was evaluated by the Dean of Veterinary Medicine, but approval for major expenditures and tenure-track faculty hiring remain a departmental responsibility. Other hires (staff positions, non-tenure-track faculty) require the approval of both the department chair and the Dean of Veterinary Medicine.*
- “Establish goals for the continued development of a laboratory-wide Quality Assurance system.” *The VDL has implemented changes to meet AAVLD requirements before the next review in 2007.*
- “Re-consider the apparently historic separation of toxicology and chemistry.” *The opportunity for intense specialization in chemistry is supported by the interpretive, clinical, and environmental expertise of the toxicology section.*

Accreditation
Status

In November 2002, the American Association of Veterinary Laboratory Diagnosticians granted full accreditation, all species, to ISU's Veterinary Diagnostic Laboratory for the period 2002-2007. VDL will submit a progress report during Fall 2003.

Bachelor of Science in Industrial Technology

Program
Description

The Department of Industrial Education and Technology offers a four-year Bachelor of Science degree in Industrial Technology. The curriculum in Industrial Technology provides two options to prepare students for employment in business or industry – (a) manufacturing and (b) industrial safety.

Accreditation
Agency

The National Association of Industrial Technology (NAIT) is the accrediting agency for post-secondary industrial technology programs.

On-Site Visit
Team Report

The on-site visit by peer evaluators occurred in April 2002. The team report addressed the 62 accreditation standards that apply to the bachelor's program. The report indicated that the program met all of the criteria of 54 standards; the program met most of the criteria for the remaining eight standards but weaknesses or deficiencies were noted and need to be corrected for continued accreditation. A progress report to the accrediting agency is not due until 2004; however, the provost's office requested a progress report during Spring 2003. The department was asked to focus on the deficiencies involving the curriculum and did not involve funding issues.

Eight Standards with Deficiencies

Program
Development,
Revision, and
Evaluation

“Some evidence was provided that course development, revision, and evaluation are performed regularly by appropriate staff, administration, faculty, graduates, and the advisory council. Little documentation was found that underscored the direct involvement of students and graduates. Documented reviews by current students and graduates need to be improved.”

- *Undergraduate and graduate students have been an active part of the industrial advisory council since its inception. Each semester, seniors have an opportunity to respond to a follow-up survey regarding their evaluation of the overall program. The department will work with a student focus group to review the instrument and develop a strategy to ensure a higher response rate.*
- *Each semester, internship supervisors evaluate their students. During the coming year, the department will ask internship supervisors to evaluate the program and to develop an assessment instrument for curriculum feedback.*
- *The department intends to investigate the use of the OPAL program to assess individual student competencies related to future professional employment.*
- *The department will reconsider its organizational structure in the coming year and, if committees are reconstituted, undergraduate and graduate students will be included as members.*
- *A student advisory group will be started in Spring 2003 to provide advice to the chair on issues related to the undergraduate experience and curriculum.*
- *The last follow-up survey of alumni was conducted in 2001; the department intends to establish a process to conduct a follow-up every two years. The results of the survey will be used for program curriculum improvement.*

Study Guides

“Current syllabi are available at the beginning of each term for every course. They are reviewed and maintained regularly. To improve understanding and assist in keeping current the syllabi format could be standardized for each course offered. References outside of the course textbook and software utilized are not specified for numerous courses. Grading scales are inconsistent – some use the seven point scale while others use a 10 point scale and still others do not indicate which scale is used. All syllabi included a weighting of assignments and tests. Assignments and due dates were not specified in numerous syllabi.”

The department will discuss a standard format for all syllabi and implement it in Fall 2003. Textbook, software, and reference materials required for the course will be included in the syllabus. Inconsistent grading practices and departmental policies will not be addressed. The

standard does not mention the need for a consistent means of grading, such as 7-point scales, 10-point scales, or letter grades. The team report indicated that students are informed of grading procedure and that grading policies are uniformly and fairly administered.

Scholastic
Success of
Students

“Self-study documentation and on-site discussions point to a possible lack of uniformity between the grading practices in industrial technology courses and other courses in the institution. Based on this evidence, the visiting team believes that some degree of grade inflation may exist in industrial technology courses and, therefore, scholastic achievement of industrial technology students in major courses may not be equal to that of other courses. Data collected between 1996 and 2001 indicate that the percentages of earned grades of A – B for ITEC courses are higher than those of ISU students in general; the variation was anywhere from 2 to 10 percentage points. However, the percentages of lower grades (C+ to D-) for ITEC courses are below those of other ISU courses in general. The superior performance of the ITEC students, however, does not hold when comparing graduation GPAs of the ITEC seniors with other ISU seniors. The overall GPA of ITEC seniors was as much as .25 points below that of other ISU graduating seniors. In summary, the team concluded that more As and Bs and less Cs and Ds are given in ITEC courses than other ISU courses. However, as evidence by graduation index, the ITEC students do not perform as well in non-ITEC courses.”

The department is concerned about the rigor of its program and will hold discussions with faculty and graduate teaching assistants to discuss what individual grades mean in industrial technology in order to maintain academic quality in the program. Additional data analysis will be conducted to assess the position of graduating seniors within the university more accurately and will be included in the NAIT two-year follow-up report.

Adequacy of
Facilities and
Equipment

“Interviews with students, faculty, and advisory council members and personal observation indicate that equipment is suitable to serve the goals and objectives of the programs. Given that, the facility needs renovation and updates to enable the faculty to continue to make it serve the goals and objectives of the program and program options. Some renovations are being planned, but there was not a firm timeline established for implementation of the plans.”

As directed by the Provost's Office, the department did not respond to this deficiency.

Support for
Facilities and
Equipment

“Facilities and equipment needs are identified in the goals and objectives in general methodology. Improvement could be made to identify specific needs related to each option independently. Manufacturing technology should have a separate requirements list with timelines from the Industrial Safety option. Also sources of potential future funding beyond that provided by the state is not well identified or planned.”

As directed by the Provost’s Office, the department did not respond to this deficiency.

Financial
Support

“Interviews with students, faculty and advisory council members and personal observation indicate that the supplies and service budget for the Industrial Technology programs at Iowa State is adequate to support program objectives and goals. However, funding for major equipment is not a line item, but is left to block budgeting that is not a guarantee of funds being provided when needs exist, nor does it allow for long-term equipment purchase planning. Equipment purchases rely on end-of-year funding; funds may not be available in times of tight budgets.”

As directed by the Provost’s Office, the department did not respond to this deficiency.

Placement
Services

“Placement services are provided through ISU Engineering Career Services. The level of these services seems to be quite adequate and the availability of these services is well publicized. Data indicate that a large number of companies and job openings are registered specifically for IT students and a large number of students are registered through these services for these interviews. Whereas the level and availability of these services seems to be quite adequate, the placement data do not match the adequacy of these services. Based on the self-study data, only 60% of graduating seniors leave campus with secured employment. Although the report states that the remaining 40% will secure positions within six months of their graduation, no supporting data were provided. Whereas the University provides adequate placement services, the department needs to make additional marketing efforts, i.e., job fairs, and make a stronger effort in collecting follow-up placement data.”

The self-study erred in reporting placement data at the time of graduation. Employment data are reported by the human resources field and the University within six months of graduation. ISU’s Education Career Services’ Annual Statistical Report completed in January 2001 indicated that 94.7% of those surveyed (n=57) returned the instrument; 97.3% of the manufacturing option graduates were employed and 90.0% of the industrial safety option graduates were employed. It does not seem prudent for the department to conduct its own job fair because industrial technology students actively participate in the College of Engineering’s Fall College Fairs and Spring Career Expos.

Assessment Plan
and Integration

“Components of the assessment plans are in place, but there are aspects that are weak or missing. Assessment is more than grading. It is evidence of the mastery of student competencies. There was no evidence of these outcomes other than grades. There was a table of an employer’s follow-up study rating graduates’ preparation in 16 different areas. The problem with this was it was not related to student competencies just general areas of preparation. There was no comprehensive compilation of the results of the assessment measures used. This makes it difficult to provide evidence that the results are used to improve the program. The Technology Learning Community was initiated in 1999 and may be an avenue that could be expanded to play a greater part in the assessment plan. The one thing the team noticed was that there really was no common thread that ran through the self-study and tied assessment to the programs.”

- *Student outcomes assessment has been a part of the culture in the College of Education since the early 1990s. The department will look at ways to integrate its lengthy set of competencies with the documentation that they have been achieved, along with demonstrating the assessment of broad goals which are desired to be met at the time of graduation.*
 - *The department will review its student outcomes assessment plan and evaluate it for relevance and effectiveness. The department will form a separate Outcomes Assessment Committee and include student members.*
 - *Professional development opportunities for faculty to learn more about student outcomes assessment will be provided and at least one faculty member will be encouraged to attend the Alverno College outcomes assessment workshop.*
 - *The department’s goal is to reach full implementation of a Level Three status (Maturing States of Continuous Improvement) on the Higher Learning Commission’s Levels of Implementation and the Patterns of Characteristics Analysis Worksheet by 2004-2005. To accomplish this, the department must develop a culture of shared responsibility toward continuous improvement; support in terms of time, structure, and monetary commitment; effectiveness in identifying the broad student outcomes at the time of graduation along with the individual competencies development through its curriculum; and a system of assessment to ensure that these goals and competencies are met.*
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Accreditation Status The National Association of Industrial Technology (NAIT) Board of Accreditation granted accreditation to ISU's Bachelor of Industrial Technology – Manufacturing option and Industrial Safety option through November 1, 2008. A report addressing the eight standards that were in partial compliance is due to NAIT 45 days prior to November 1, 2004.

Copy of Materials A complete copy of the materials on the accreditation actions, including the self-studies, on-site visit team reports, institutional responses, and letters of formal notification of accreditation, is on file in the Board Office.

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dg/h/aa/accred/03/ISUaccred.doc

Approved:

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