

UNIVERSITY ASSESSMENT COMMITTEE
Feedback to Academic Departments on Assessment Activities Reported in 2007-08 Annual Reports

DEPARTMENT Computer Science **DATE** March 20, 2009

COMMITTEE MEMBER(S) CONDUCTING REVIEW Mary Askim-Lovseth, Joan Hawthorne

1. STUDENT LEARNING GOALS

- | | | | |
|---------------------------------------|----------------|----------------|---------------------------|
| • Were any goals referenced? | YES <u>U,G</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • If so, were goals well articulated? | YES <u>G</u> | NO <u> </u> | QUALIFIED Y/N <u>U</u> |
| • Do goals address student learning? | YES <u>G</u> | NO <u> </u> | QUALIFIED Y/N <u>U</u> |

Comments:

Undergraduate: The annual report mentioned a new undergraduate assessment plan which is apparently not yet available on the web (October 2003 is posted). However, the goals identified in the annual report itself do not clearly articulate what students will know and/or be able to do by the time of graduation. (Because of ABET's definitions, very specific distinctions are made among goals, outcomes, and objectives, and what we are interested in is "outcomes" which would be measurable at the time of graduation.)

Graduate: The Computer Science Department has two graduate tracks, Applied Software Engineering and Computer Science). Four assessment plans are posted (February 2006)—Comprehensive Examination Assessment, Defense Assessment, Thesis Assessment, and Software Engineering Document Assessment. Goals are identified in the assessment plans (and in the annual report) and most goals clearly identify what students will know and/or be able to do by the time they complete the program of study.

In addition to the Departmental goals, please also consider UND's Institutional and Essential Studies goals for student learning (shown in alignment within parentheses). Use 'U' (undergraduate) or 'G' (graduate) to identify UND/Essential Studies goals which are similar to the referenced departmental goals.

- G 1 Communication – written or oral ("able to write and speak in various settings with a sense of purpose/audience")
G 2 Thinking and reasoning – critical thinking (or "be intellectually curious"; analyze, synthesize, evaluate)
G 3 Thinking and reasoning – creative thinking (or "be intellectually creative"; explore, discover, engage)
 4 Thinking and reasoning – quantitative reasoning ("apply empirical data...analyze graphical information")
G 5 Information literacy ("be able to access and evaluate...for effective, efficient, and ethical use")
 6 Diversity ("demonstrate understanding of diversity and use that understanding...")
U 7 Lifelong learning ("commit themselves to lifelong learning")
U 8 Service/citizenship ("share responsibility both for their communities and for the world")

Comments regarding departmental goals and alignment of departmental goals with institutional and Essential Studies goals:

Undergraduate: It is difficult to describe alignment with such limited information.

Graduate:

2. ASSESSMENT METHODS

- | | | | |
|--|-----------------|----------------|---------------------------|
| Were any specific assessment methods referenced? | YES <u>G</u> | NO <u>U</u> | QUALIFIED Y/N <u> </u> |
| • If so, were specifically chosen assessment methods appropriately aligned with individual goals? | YES <u>G</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • Were both direct and indirect assessment methods used as components of a "multiple measures" approach? | YES <u> </u> | NO <u>G</u> | QUALIFIED Y/N <u> </u> |

Comments:

Undergraduate:

Graduate: No indirect methods were described within the annual report.

3. ASSESSMENT RESULTS

Were any assessment results reported?	YES__G__	NO__U__	QUALIFIED Y/N ____
• If so, were the results clear in terms of how they specifically affirm achievement of goals?	YES__G__	NO__	QUALIFIED Y/N ____
• If so, were the results clear in terms of how they indicate need for improvement?	YES__G__	NO__	QUALIFIED Y/N ____
• Were the results tied to goals for student learning?	YES__G__	NO__	QUALIFIED Y/N ____

Comments:

Undergraduate:

Graduate: We note that when the minimum score in all areas except two is a 4.0 (3.0 in clarity and organization), that would cause us to take a closer look at what's happening in those two areas. Also noted are what seems to be a series of typos under goal 2, objective 2.1 – minimum scores are reported at 4, but average scores range from 3.4 to 3.8. Something must be wrong. And, again (if the averages are accurate), you would want to look at why scores on objective 2.1 are uniformly lower than those on objective 1.2 Is one goal less emphasized within the program (e.g., written communication is done less frequently than oral, perhaps)? It was indicated that comprehensive examinations were used to assess Goal 1, Objective 1.1, and a Master's Software Engineering project was used to assess Goal 3, Objectives 3.1 and 3.2, yet no data were reported.

In addition to departmental goals, some assessment results may be applicable to institutional and Essential Studies goals. Use 'U' (undergraduate) or 'G' (graduate) to identify those results which are applicable to institutional/Essential Studies goal achievement. For indicated items, please describe findings in the appropriate section below. .

- _____ 1 Communication – written or oral (“able to write and speak in various settings with a sense of purpose/audience”)
- _____ 2 Thinking and reasoning – critical thinking (or “be intellectually curious”; analyze, synthesize, evaluate)
- _____ 3 Thinking and reasoning – creative thinking (or “be intellectually creative”; explore, discover, engage)
- _____ 4 Thinking and reasoning – quantitative reasoning (“apply empirical data...analyze graphical information”)
- _____ 5 Information literacy (“be able to access and evaluate...for effective, efficient, and ethical use”)
- _____ 6 Diversity (“demonstrate understanding of diversity and use that understanding...”)
- _____ 7 Lifelong learning (“commit themselves to lifelong learning”)
- _____ 8 Service/citizenship (“share responsibility both for their communities and for the world”)

Comments regarding results and the application of results to departmental, institutional and Essential Studies goals:

Undergraduate:

Graduate:

4. CLOSING THE LOOP

Were any actions taken on the basis of assessment results reported?	YES_____	NO__U__	QUALIFIED Y/N __G__
• If so, do curricular or other improvements/changes arising from assessment results directly address goals for student learning?	YES_____	NO__G__	QUALIFIED Y/N ____

Comments:

Undergraduate: The annual report cites changes made to the curriculum, but those changes appear to have stemmed from enrollment concerns rather than assessment findings. The changes were the addition of three service courses targeted toward non-computer science majors and prospective computer science majors and have no connection to the undergraduate program.

Graduate: No changes to the curriculum were reported. One discussion about the graduate program appears to be stemming from indirect assessment findings (which were not reported here). That discussion is about the infrequency of elective course offerings and the resulting narrow selection of electives in any given semester. Again, this appears to be in response to program enrollments rather than in response to assessment findings. Changes in methods of collecting and recording data are also cited.

SUMMARY

Strengths

- ☐ G_ A specific plan for assessment is in place.
- ☐ G_ Student learning goals are well-articulated.
- ☐ G_ Assessment methods are clearly described.
- ☐ Assessment methods are appropriately selected.
- ☐ Assessment methods are well-implemented.
- ☐ Direct and indirect methods are implemented.
- ☐ G_ Results are reported.
- ☐ Results are tied to closing the loop.
(Decision-making is tied to evidence.)

Areas for Improvement

- ☐ No specific plan for assessment is in place.
- ☐ Student learning goals are not well-articulated.
- ☐ Assessment methods are not clearly described.
- ☐ Assessment methods are not appropriately selected.
- ☐ Assessment methods are not well-implemented.
- ☐ A single type of assessment methods predominates.
- ☐ U_ No results are reported.
- ☐ U_ Results are not clearly tied to closing the loop.
(Decision-making is not directly tied to evidence.)

OVERALL SUMMARY AND RECOMMENDATIONS:

At least at the graduate level, assessment is clearly in place. Data for some objectives appear to be preliminary (i.e., small amounts of data collected so far) and no changes have been made that clear stem from assessment findings.

In order to properly describe the impact of the new plan for assessment of undergraduate learning, more information is needed.

Reviewer(s):	Name	<u>Joan Hawthorne</u>	<u>Mary Askim-Lovseth</u>
	Department	<u>Academic Affairs</u>	<u>Marketing</u>
	Phone Number	<u>7-4684</u>	<u>7-2930</u>
	e-mail	<u>joan_hawthorne@und.nodak.edu</u>	<u>mary.askim@mail.business.und.edu</u>

Section 1: _(U), Y(G)_ Section 2: _N(U), Y(G)_ Section 3: _N(U), Y(G)_ Section 4: _N(U,G)_

Coding Key:

- Y = yes, this is done appropriately and well
- N = no, this is not done at all, or it is not done in relationship to student learning
- NA = no information available
- ? = action or progress is apparent; however, evidence is lacking that this is completely and appropriately done