Emmett & Miriam McCoy College of Business Administration

DIRECT ASSESSMENT RESULTS BBA PROGRAM GOALS OF CRITICAL AND ANALYTICAL THINKING AND INFORMATION TECHNOLOGY

Prepared by the McCoy College Assessment Committee:

Dr. Michael Keeffe, Committee Chair, Department of Management
Dr. James Cook, Department of CIS/QM
Dr. Taewon Suh, Department of Marketing
Prof. Sherry Ross, Department of Accounting
Dr. Glenn Tanner, Department of Finance & Economics
Dr. Robert Olney, Associate Dean, Ex-officio

Document Submitted: Spring 2008

Embedded Assessment Results for BBA Program Goals 2 and 3

Background:

Course embedded (direct) assessment of program-level goals in the McCoy college is conducted on a regular basis to ascertain student performance and to corroborate indirect (survey-oriented) assessment of these goals. For the 2006-2007 academic year, the college focused on BBA Program Goals 2 and 3:

BBA Program Level Goal 2 and 3:

Goal 2: Use critical thinking skills to evaluate information, solve problems, and make sound decisions.

2a. Synthesize and evaluate the relevance of data

2b. Demonstrate analytical and reflective thinking skills in exploring new questions, analyzing complex issues from multiple perspectives, and arriving at reasoned conclusions.

Goal 3: Use information technology skills in decision-making.

3a. Learn to use Information Technology (IT)

3b. Apply IT in analysis and communication

Methods:

The BBA Course Alignment Grid identifies core courses that both cover and assess critical thinking skills and informational technology skills. Faculty in each of these core course teaching groups participated in this assessment. Faculty were asked to assess students using the criteria of Exceeds Expectations, Meets Expectations, or Does Not Meet Expectations. Working with faculty teaching core course sections, each core course coordinator chose their course's method of assessment, which included common test questions and assignments as well as assessment rubrics. Specific assessment tools for each course are available from the Assessment Committee. Additionally, given the large number of students enrolled in these courses, some core course coordinators used a sampling approach rather than a census.

Goal 2: Critical Thinking Skills

Faculty from 10 courses covering all business school disciplines assessed and reported students' critical thinking skills during 2006-2007. The results are presented below:

Course	Exceeded Expectations	Met Expectations	Did Not Meet Expectations
ECON 2314	NA	62% (Goal 2a) 54% (Goal 2b)	38% 46%
QMST 2333	67.9%	22.01%	10.06%
ACCT 2361	NA	52.1%	47.9%
ACCT 2362	4%	29%	67%

BLAW 2361	NA	79.6%	20.4%
FIN 3312	7.3%	65.2%	27.5%
MKT 3343	NA	85%	15%
CIS 3380	39.9%	40.7%	19.4%
MGT 3353	NA	80.4% (Goal 2a) 87.2% (Goal 2b)	19.6% 12.8%
MGT 4335	21% (Goal 2a) 24% (Goal 2b)	64% 67%	15% 9%

Note: Professors who assessed using multiple choice questions reported only Met Expectations (correct answer) or Did Not Meet Expectations (incorrect answer).

Goal 3: Information Technology Skills

Faculty from 8 courses covering all business school disciplines assessed and reported students' information technology skills during 2006-2007. Specific assessment tools for each course are available from the Assessment committee. The results are presented below:

Course	Exceeded Expectations	Met Expectations	Did Not Meet Expectations
CIS 1323	84% (Goal 3a) 69% (Goal 3b)	11% 13%	5% 18%
QMST 2333	69.08%	15.91%	15.01%
ACCT 2361	66%	22%	12%
ACCT 2362	59%	23%	18%
FIN 3312	9%	76%	15%
MGT 3353	NA	96%	4%
MKT 3343	NA	79%	21%
CIS 3380	40%	41%	19%

Observations

1. The committee would like to emphasize that this reported direct assessment data is preliminary and provides only baseline data for measuring continuous improvement of student performance on these goals.

2. Because the assessment covers an extremely broad range of classes, from a freshman level course to the business capstone course, the data is extremely noisy. This noise is amplified by several factors:

    a. Importance of assignment – Students' participation and performance is affected by the weight the assessment tool counts towards their final grade. For example, ACCT 2361 assessed information technology skills using a small assignment, and 44% of the enrolled students elected not to attempt the assignment. MGT 4335 assessed critical thinking with a 12-page corporate analysis project that constituted a major portion of the course grade.

b. Differing levels of expectations – It is doubtful that the suggested criteria of Exceeds Expectations, Meets Expectations, or Does Not Meet Expectations were applied uniformly. For example, in assessing information technology skills, CIS 1323 defined Meets Expectations as "partially correct" and Exceeds Expectations as "without errors," while FIN 3312's rubric defined Exceeds Expectations as "goes above and beyond." Expectations might differ not only in freshman-level classes versus senior-level classes, but also across disciplines as well – because developing information technology skills is a primary goal of a course such as CIS 1323 or CIS 3380, the level of skills expected in the course would likely differ from other courses such as MGT 3353. Because of these differences, the committee expressed reservations about drawing meaningful conclusions when comparing results across courses.

c. Reporting method inconsistencies – Some core course groups reported student performance based on census data from a question or assignment (i.e. 80% of students answered question #20 correctly). Since multiple questions from core course groups are being used to assess student performance on a particular goal, the committee is unable to determine how many students exceeded, met, or did not meet expectations. For example, 10 questions on an exam might have been used to assess critical thinking, and the core course group reported overall student performance on each individual question. The core course group should have 'standards of performance' (i.e. 9 correct answers exceeds expectations; 7 correct answers meets expectations), and report assessment information based on how many students exceeded, met, or did not meet the standard determined by faculty in the core course group.

d. Differing definitions – Different core course teaching groups in various departments do not appear to have unified definitions of either "critical thinking" or "information technology." The committee examined several courses' assessment tools and had disagreements about whether a particular test question was evaluating critical or analytical thinking skills. This issue was presented to the McCoy College Curriculum Committee and CBAC beginning in fall 2007 and it was agreed that a college-level task force would examine the goal structure and wording during the next academic year.

3. The committee believes that improvements in assignments and logistics of assignments, better training of evaluators, and more concise rubrics would enhance the quality of the direct assessment data collected. Given the diversity of courses contributing, the perspectives of faculty in departmental core course teaching groups, and that courses range from freshman to senior level, "noise" cannot be entirely eliminated and the results are open to interpretation.

4. Even with the noisy data, the overall results were good and corroborated results from the 2007 Alumni Survey. That survey showed that alumni ranked their personal development of information technology skills and critical thinking skills as fifth- and

sixth-best out of 20 areas. Fifty-five percent of alumni said that their education "very much" developed their IT skills, while 38% said their education "somewhat" developed their IT skills. The alumni rated their critical thinking development at 53% "very much" and 39% "somewhat."

Recommendations:

1. Although wholesale or radical changes in curriculum and course content should not be made based on baseline data, continuous improvement of information technology and critical thinking skills should remain a priority of the BBA program and of individual departments and their majors.

2. To provide more meaningful data the next time Goals 2 and 3 are assessed, course coordinators, across all departments in the college, should agree on a more unified definition of "critical thinking" and "information technology" consistent with their field of study and/or expertise, and should insure consistent rubrics are applied within core course teaching groups to evaluate these skills. The Assessment Committee will need to discuss methods and resolve different interpretations of critical thinking from core course teaching groups, both by field of study and level of presentation, to better present assessment information to college faculty for course and program modification.

3. Core course teaching groups will need to report assessment information by individual student performance rather than report census student performance on each of many questions and/or individual assignments. If 10 individual questions are being used to assess student performance on a particular goal, faculty will need to develop overall standards for exceeding, meeting, or not meeting expectations based on the 10 question array, and report how many students, or the percent of students, are in each category based on the standards developed.