

Date: May 31, 2014

To: Committee on the Assessment of Student Learning (CASL), c/o Michelle Schmidt and Carol Traupman-Carr

From: Jim West, Economics and Business Department Chair



RE: ECONOMICS AND BUSINESS DEPARTMENT 2013-14 ASSESSMENT

The Economics and Business Faculty conducted an end of year multi-tool assessment. This process represents the culmination of ongoing assessment discussions at department meetings as well as focused meetings of our individual major areas (i.e. Accounting, Economics and Management). We continue to assess learning outcomes through objective measures, including a newly crafted assessment tool which estimates learning outcomes using subjective measures. Put together we are able to use two separate estimates of learning outcomes that strengthens our ability to assess whether we are successfully teaching our students what we want them to know. Prior to beginning our presentation and discussion of our assessment results, we offer the general observations:

- The Department administers majors in Accounting, Economics (Theory and Policy, Finance Tracks) and Management (Marketing, Organizational Leadership and Sports Management Tracks), and interdepartmental majors in International Management and Environmental Economics and Policy. We also offer a minors, individually designed majors (esp. Healthcare Management); oversee 5yr BA/Masters programs, a 150 credit hour Accounting option for CPA candidates. We administer five active student clubs covering activities in Accounting, Economics, Finance, Human Resources, Marketing and an Honor Society. The Department is actively engaged in the Learning in Common curriculum, Writing Intensive course work, and Honors, SOAR, study abroad and Independent Study opportunities for our students.
- The Department engages regularly in vigorous discussions regarding desired student outcomes. We reaffirm the four outcomes: Critical Thinking, Ethical Perspective, Global Appreciation, and Specific

Content Knowledge as central to our mission. We committed to more explicit reference of these goals to students through course syllabi and class discussion, particularly at the opening of the semester.

- An assessment component covering these four desired outcomes was integrated into the course evaluations and administered to all classes, including all of our majors and many non-majors; Statistical analysis was conducted for each course for each faculty member. These were reviewed at an end of year department meeting and will be an agenda item for discussion early in the fall semester of 2014-15.
- In addition to department wide assessment, we are including individual course assessments for a selection of courses representing introductory and upper-level course work in the department. These assessment tools include objective testing (multiple choice questions of content specific aspects), as well as open-ended responses to case studies.
- The Department engages in many discipline-related extracurricular and in-class activities that focus on hands on learning experiences. These include seminars and debates, intercollegiate case competitions, learning portfolios (including innovative e-portfolios), class trips to local and regional business and nonbusiness organizations, many internships as well as Honor's and SOAR projects. These are evaluated in a number of ways but are generally assessed by a subjective, yet consistently observed, high level of student satisfaction. It is worth noting that this year the Accounting Club fielded a team that represented the College as finalists in national case competition. An assessment of internships is included in this report which provides an external perspective of student achievement.

1. Administer this tool separately from end-of-semester course evaluations, but continue to implement toward the end of each semester.
2. Collect responses in a clearer way (perhaps through Google Forms) that will facilitate more rigorous statistical analysis.
3. Consider a pre and post-test model for implementing this tool.
4. As a department faculty, discuss the preliminary results gleaned from this pilot study to determine what adjustments should be made to our respective courses and departmental activities.
5. Make a deliberate choice about whether each departmental course offering needs to include all four outcomes; if not, formalize which outcomes are relevant to which courses.

Economics and Business Department 2013-14

New Assessment Tool

Summary

In our continuing efforts to enhance our ability to assess our departmental outcomes, the Economics & Business Department developed and implemented a pilot test of a new assessment tool that will provide an additional estimate to gauge learning outcomes. We selected four of our Departmental outcomes and created the following four questions to assess how well we are achieving these outcomes:

This course enhanced my ability to:

- a) Consider the ethical implications of decisions (ethics)
- b) Apply critical thinking skills in decision making (critical thinking)
- c) Integrate concepts and methods from a variety of disciplines (integration)
- d) Consider global perspectives when evaluating issues (global)

We chose to add these questions to the end of semester course evaluations for all Spring 2014 courses offered by our department: 10 accounting courses, 13 economics courses, 15 management courses. The questions were inserted between the ten course rating scale evaluation questions and the open-ended questions. Students were asked to rate each of the four questions from 1 to 5, using the established anchors (1 = strongly disagree to 5 = strongly agree) of the course evaluation form.

A total of 477 student responses were obtained: 103 in accounting courses; 145 in economics courses; and, 229 in management courses. This total reflects the number of students who indicated numbers only on the outcomes assessment portion of the course evaluation form. It does not include blanks, yes/no's, question marks, etc.

The table below reports both the mean reported ranking per question per discipline and the aggregated mean per question across disciplines:

| | ACCT | ECON | MGMT | DEPT |
|-------------------|------|------|------|-------------|
| Ethics | 3.99 | 4.21 | 4.49 | 4.23 |
| Critical Thinking | 4.14 | 4.48 | 4.53 | 4.39 |
| Integration | 4.09 | 4.29 | 4.55 | 4.31 |
| Global | 3.85 | 4.27 | 4.47 | 4.20 |

Discussion

In general, we are encouraged by the potential for this tool to provide meaningful data in the future that will guide our efforts to achieve and exceed our Departmental outcomes. We see this tool as a useful way to gauge not only how effective specific courses are at delivering the desired outcomes, but how well the primary

departmental disciplines (ACCT, ECON and MGMT) and the Department as a whole are achieving these outcomes.

There is valuable learning gained from this pilot study that includes:

1. A significant number of students (probably between 33% and 50% or more) in each class were unsure of how to respond to the questions. Some used check marks or responded "yes" or "no". This tells us we need to be clearer in our instructions.
2. We have good descriptive data, but it is somewhat sparse due to "1" above; while averages are useful indicators, it would be useful to look at the variability across student responses. We can conduct more reliable statistical analysis once we administer more explicit and precise prompts in eliciting student responses.
3. This could explain some of the results of the study" and replace with "Some of the results of the study indicate that not every course intended to deliver all four of the selected departmental outcomes. For example, in Principles of Economics, the data indicate that most students felt that their critical thinking, integration across disciplines and global skills were enhanced by taking the course, but ethical implications of decision making was given the lowest score across outcomes. It is important to note that while principles of economics is a broad ranging course, learning outcomes focus specifically on critically evaluating economic policy using appropriate and basic models, introducing students to basic economic terminology, and identifying and evaluating drivers of economic change (including ethical/cultural/global components). There are some aspects of the standardized learning outcomes which will naturally not be emphasized as much as others depending on the focus of the course.
4. Not every course focused or had as part of its intended outcome, all four of the selected Departmental outcomes. This could explain some of the results of the study.
5. From cursory observation by individual faculty, it appears that the outcomes assessment responses seemed to mirror course evaluation responses. Students may have approached assessment questions with the same mindset as they did the instructor and course evaluation questions, rather than from an outcomes assessment perspective.
6. We acknowledge that our learning from this study is an enriched sense of process and the usefulness of the tool more than conclusive data related to our outcomes. However, we feel this was an important step forward that will hone and add to our set of tools for assessment and serve our assessment process for the Department in the future.

Future Actions

Going forward, we plan to incorporate this new assessment tool at the end of each semester as a part of our overall Departmental assessment process with the following changes and additions:

Course Evaluations - ECON 152 and ECON 211

Course: Econ 211, The Economics of Health and Healthcare

Course Learning Outcome Assessed: Become informed citizens capable of analyzing the healthcare debate from an economist's perspective.

Assessment Method: Survey at the end of the course

One of the goals of Econ 211 is for the students to develop an understanding of the relevance of health economics principles in the world in which they live. This goal becomes even more significant considering the current attention paid to public policy measure related to health and healthcare. Better-informed citizens serve to benefit us all!

At the culmination of the semester, I asked students to answers to following questions based upon how they believe their participation in Econ 211 helped (or didn't help) them achieve the stated objected. The students were instructed to respond with a 0, 1, 2, 3, 4, or 5. A zero implied that they disagreed completely with the statement, and a five implied that they agreed completely with the statement.

The table below details the questions combined with the average and median responses. I had 100% participation in this survey.

| Question | Mean Response | Median Response |
|---|---------------|-----------------|
| 1. I am better prepared to evaluate the policy implications of the Affordable Care Act (ACA) as an economist would. | 4.84 | 5 |
| 2. I am more informed than I was when I entered this class about the ACA and its implications. | 4.88 | 5 |
| 3. I have an appreciation for the complexities involved within the healthcare market. | 4.72 | 5 |
| 4. I understand the circumstances surrounding market failure in healthcare markets. | 4.6 | 5 |
| 5. I understand why and how (from an economic standpoint) the government intervenes in the market for healthcare. | 4.64 | 5 |

I am encouraged by the feedback above. In future semesters, I would like to include a pre-test to determine how students' levels of understanding change over the course of the semester. I am further reassured by the students' responses to the one open-ended question on this survey:

"What is the single most important thing you will remember from this course (long after you submit your final paper)?"

The responses below support the findings from the table above:

- "I now understand why the government mandates everyone to have healthcare so people do not just buy it when they are sick."
- "For every benefit, there is a cost. Although the ACA is not perfect, it will be better off in making our healthcare system more accessible."
- "I will leave this course understanding the ACA and how it works. Coming into this class I heard of it but didn't know it. I didn't think it would affect me, but in the long run it will."

Course: Econ 225, Intermediate Macroeconomics

Course Learning Outcomes Assessed:

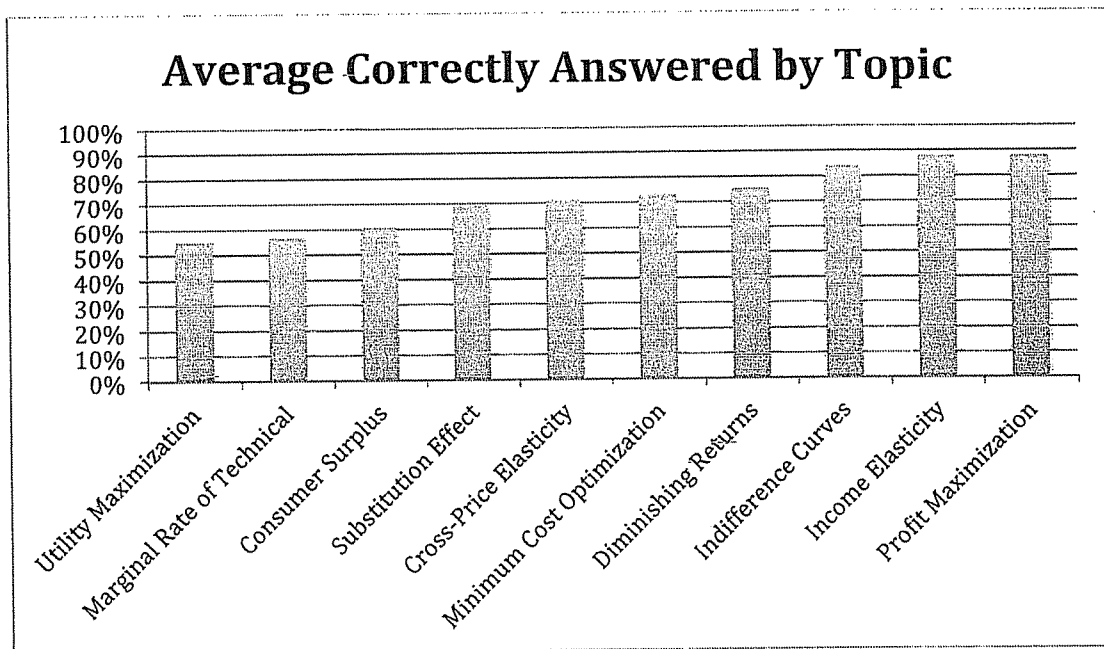
1. Identify and describe the main theories of utility- and profit-maximization.
2. Develop critical-thinking and problem-solving skills as they relate to microeconomic analysis.

Assessment Method:

1. Content-specific multiple-choice questions answered within the final exam.
2. Open-ended question answered within the final exam.

In my first semester teaching Intermediate Microeconomics I was concerned with assessment in two areas. The first area was content. I used content-specific multiple-choice questions to assess basic understanding of the principle concepts and theories in this course.

The subsequent graph identifies the percentage of students correctly answering the content-specific multiple-choice questions. I am relieved to find that on average each question was answered correctly by over half of the students. My goal, however, would be to have at least 70% of the students answering each question correctly.

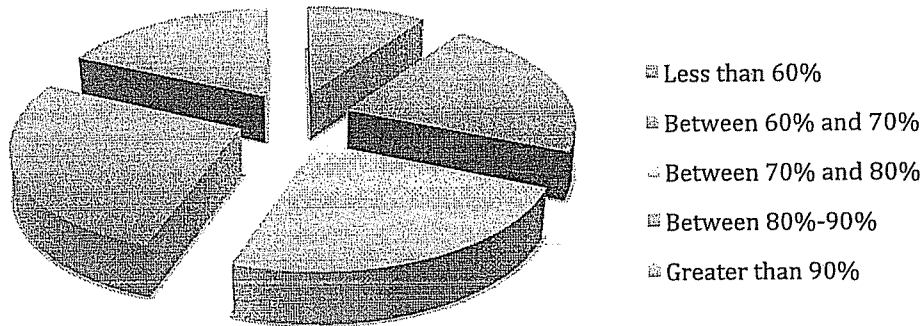


The details in this graph provide feedback for me as I prepare to teach this course again in the fall semester. I will reconsider my teaching method within those areas in which the students performed at a lower average level.

The following graph gives an indication of individual performance of each student. The shaded regions depict the percentage of students who scored within each range based upon their cumulative individual answers. For example, the light blue region shows that 18% of the students answered at least 90% of the content-specific multiple-choice questions correctly. Contrastingly, the dark blue wedge shows that 10% of students answered less than 60% of the content-specific multiple-choice questions correctly.

My goal is to continue to improve my interactions (including assignments, assessments, and problem-solving activities) with students to increase the number of students answering at least 70% of the content-related questions correctly. I can compare the results from this semester with future semesters to gauge improvement in content understanding overall.

Correctly Answered Questions by Student



The second assessment area of concern to me was critical-thinking skills. As this course represents a challenge to many of our students, I was interesting in understanding whether the students would gain these economic reasoning skills from the course. In order to assess this outcome, I included an open-ended question at the end of the final exam that read:

"What is the single most important concept you have learned in this class (i.e. what will you remember long after this final is over)?"

I share some of these answers below:

- "the most important thing I learned was not just one concept but how to think strategically and solve problems (something I was not able to do before this class)."
- "game theory because I've always wondered why similar firms open up right next to each other and it is a pretty cool concept to see why they do this."
- "I think the game theory section will play a role in my future career. I will always be in competition, so knowing how my actions can be affected by my competitors will always be important to keep in mind."
- "law of diminishing marginal returns; it applies to everything in life!"
- "I have learned that micro is everywhere from McDonalds to Taco Bell to sports teams signing players."

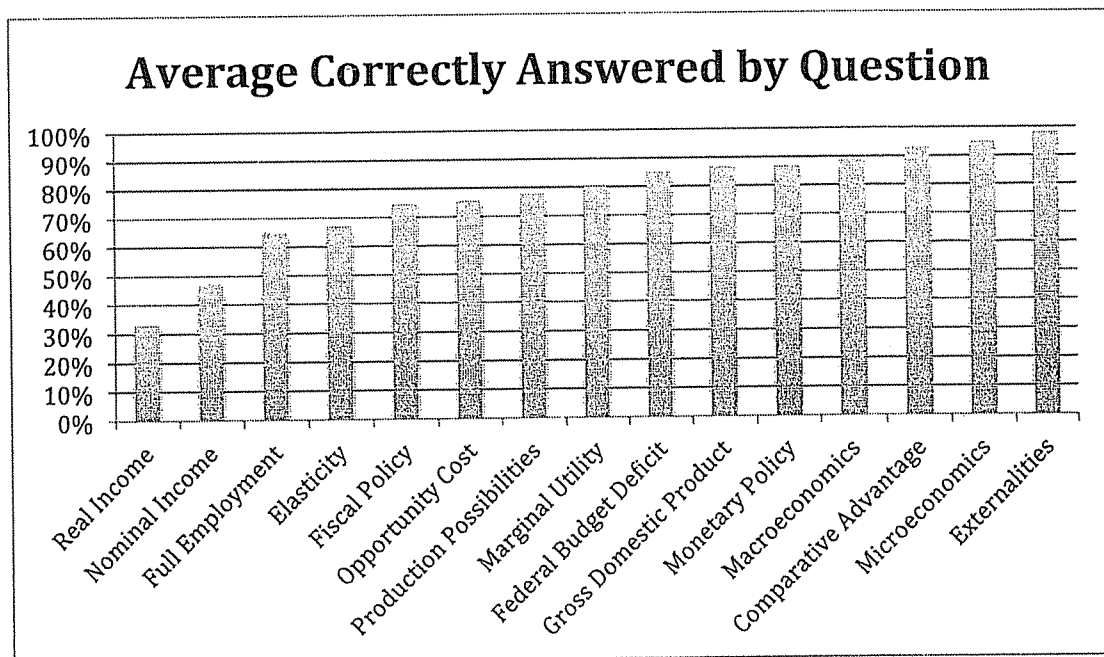
These responses provide me with a benchmark I can use for future semesters. Additionally, as I suggested previously with Econ 211, I intend provide the students with a survey upon their entrance to Econ 225 in the fall and then again upon their exit. This will enable me to further understand how this course is influencing their critical thinking skills and behaviors.

Course: Econ 152, Principles of Economics

Learning Outcome Assessed: Identify and describe the principles of micro and macro economic theory.

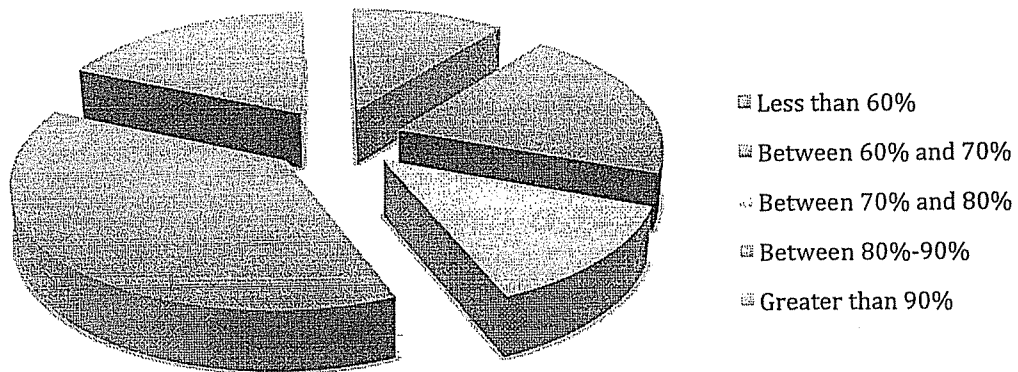
Means of Assessment: Content-specific multiple-choice questions answered within the final exam.

The following two graphs provide a similar analysis as detailed above for the content-specific questions in Intermediate Microeconomics. In Principles, however, there is a much larger variation in the level of knowledge accrued across each content area. One potential explanation is the use of standardized test questions, which do not necessarily include the same language I use in the classroom. In all but two of the questions, however, greater than 60% of the students answered the question correctly. In 11 of the 15 questions, more than 70% of the students answered the questions correctly. Again, I will use this information in future offerings of this course to guide class discussion and assignment preparation around the more challenging topics.



The following graph provides an indication of individual performance of each student. The shaded regions depict the percentage of students who scored within each range based upon their cumulative individual answers. The grade distribution is very consistent with the findings in Econ 225. Approximately 11% of the students answered less than 60% of the questions correctly, while 18% of the students answered at least 90% of the questions correctly.

Correctly Answered Questions by Student



Again, my goal is to continue to improve my interactions (including assignments, assessments, and problem-solving activities) with students to increase the number of students answering at least 70% of the content-related questions correctly. I can compare the results from this semester with future semesters to gauge improvement in content understanding overall.

As a department, we engaged in one additional assessment measure this semester. We added questions to our course evaluations to provide us with information to help determine which courses were meeting each of our departmental goals. We identified our four fundamental departmental goals as: ethical decision making, critical-thinking skills, inter-disciplinary analysis, and consideration of global perspectives.

One finding from our assessment results is that the instructions were not clear. Some students identified the level to which the course met the goal (i.e. a scale from 1-5), while other students simply used a check mark to indicate that 'yes' the course indeed met that goal.

The first table below indicates the percent of students who agreed that each course met the stated goal.

| | Econ 225A | Econ 225B | Econ 211 |
|--|-----------|-----------|----------|
| This class enhanced my ability to: | | | |
| consider the ethical implications of decisions | 70.4% | 96% | 95.5% |
| apply critical thinking skills in decision making. | 88.9% | 96% | 95.5% |
| integrate concepts and methods from a variety of disciplines | 88.9% | 96% | 100% |
| consider global perspectives when evaluating issues | 70.4% | 100% | 95.5% |
| Percent of Class Responding to these Questions: | 100% | 96.2% | 88% |

The following table is based upon a subset of student responses, and includes the responses for which a student answered with a value of 1-5.

| | Econ 225A | | Econ 225B | | Econ 211 | |
|--|-----------|--------|-----------|--------|----------|--------|
| This class enhanced my ability to: | Mean | Median | Mean | Median | Mean | Median |
| consider the ethical implications of decisions | 3.83 | 4 | 4.25 | 4.5 | 5 | 5 |
| apply critical thinking skills in decision making. | 4.08 | 4 | 4.75 | 5 | 5 | 5 |
| integrate concepts and methods from a variety of disciplines | 4 | 4 | 4.5 | 5 | 4.89 | 5 |
| consider global perspectives when evaluating issues | 4 | 4 | 4.25 | 4 | 5 | 5 |
| Percent of students responding with values (1-5) | 44.44% | | 96% | | 40.9% | |

Our department is currently synthesizing this information to determine which courses meet each goal most consistently. Once this is defined, we will construct various assessment measures related to each goal and track these outcomes across courses within our department.

Assessment of outcomes question – Economics

Academic Year 2013 – 2014

Sonia Aziz and Jim West

The outcomes:

1. Consider ethical implications of decisions
2. Apply critical thinking skills in decision making
3. Integrate concepts and methods from a variety of disciplines
4. Consider global perspectives when evaluating issues.

How assessed:

In the spring of 2014, all outcomes outlined above assessed for both general proficiency for ECON152 (Principles of Economics). A standard rubric for assessment was used during course evaluations for all sections of this class. Students were asked to indicate (on a scale of 1 to 5) the extent to which they felt their abilities outlined in outcomes 1 through 4 improved by taking this course.

Findings:

Critical thinking ranked highest on average (with an mean of 4.36 and a standard deviation of 0.56), while ethical implications of decision making ranked the lowest on average (mean of 3.84 with a standard deviation of 0.85). Integrating concepts from a wide variety of disciplines, and considering global perspectives when evaluating issues also ranked high on average (average of 4.0 with a standard deviation of 0.86, and 3.96 with a standard deviation of 0.90 respectively). However, the distribution of responses for learning outcomes 1, 3 and 4 indicate a consistency issue as responses are relatively polarized compared to outcome 2, which reports a comparatively low standard deviation. Please note that these findings do not report the binary responses given by roughly 10% of students (these students misunderstood the prompt to indicate a binary response and consequently reported their responses to each outcome with a cross or a check mark).

Our conclusion is:

We will require more explicit and precise prompts in eliciting student responses. It seems clear that most students felt that their critical thinking skills were enhanced by taking the course, and while many felt that integrating concepts and global perspectives were enhanced, these responses had a high degree of scatter: perhaps this was not a learning outcome that was consistently delivered. Ethical implications of decision making is clearly an area that is not a strong component of abilities enhanced by this course. It is important to note that while principles of economics is a broad ranging course, learning outcomes focus specifically on critically

evaluating economic policy at the micro and macro level using appropriate and basic models, introducing students to basic economic terminology, and identifying and evaluating drivers of economic change (including ethical/cultural/global components) to name a few. There are some aspects of the standardized learning outcomes delineated above which will naturally not be emphasized as much as others. A more focused rubric geared toward learning outcomes specific to discipline, in addition to the outcomes outlined above may be of use to gauge whether learning took place.

Accounting Internship Assessment: Learning outcomes analysis from Evaluations of External Internship Supervisors.

For the spring 2014 semester, I supervised a total of twenty-two (22) Internships for a total number of seventy-four (74) academic credits. Of the twenty-two (22) internships three (3) were not claiming academic credit; therefore I have limited information on them. Internships ranged from large public companies such as Air Products and Guardian to small organizations such as John Schimmel from industry such as Follett Ice to governments such as Lehigh County. Of the twenty-two (22) students they all received "A's" as a final grade. My final evaluation was based on four (4) criteria. The most important consideration was their internship supervisor's evaluation. I measured this criterion with a combination of written and verbal statements. The written evaluation included twenty-three (23) measures on a scale of one (inadequate) to five (outstanding). I am proud that there were no one's or two's. A total of eleven (11) received mostly fives with an occasional four. I attempted to normalize both positive and negative comments to the reasonable expectations of a College Intern. I also considered class attendance and participation as well as meetings with students. We met on a regular basis to discuss proper etiquette and the experiences. I also considered the learning outcomes and substance contained in the personal assessment. The final criterion was based upon completing all required paperwork on a timely basis.

Of the written comments contained in the evaluations, some samples of positive responses included:

- Works well with others.
- Strong character.
- Very proactive about seeking work.
- Was able to progress from simple 1040s to more complex ones without difficulty.
- He proved to be one of the strongest interns we have had.
- He was punctual for work and was willing to assist with different task.
- She is a hard, diligent worker who consistently aims to please.
- Ability to work with minimal supervision.
- He is very personable and not only got along with staff but was also trusted to talk with clients
- She was not afraid to tackle difficult items.
- She quickly learned new task

Of the written comments contained in the evaluations, some typical samples of negative responses include:

- Needs polish.
- He needs to check his work more closely and correct errors when needed.
- Keeping supervisors informed more timely.
- At times can be more confident in his work.
- He has the ability to problem solve, but at times, did not trust himself to take the next step.
- Maturity.

I believe there are many ways to assess the outcomes of students. At the end of the day, the only true assessment is how their future employers evaluate students. The internship supervisor's evaluation, both verbal and written, represents the most insightful assessment of a student's progress and how well they are prepared in applying the knowledge learned in the classroom and prepared after graduation. Based upon feedback from Internship Supervisors, we are generally doing an excellent job in preparing students. This does not mean there is no room for improvement, however I am confident that we are positioning our students in both hard and soft skills.

On a related note, I had my fall semester Financial Planning Class as part of the class requirements enter the Case Study Competition in "This way to CPA". One of the teams made the final fifteen teams in the country. Although they did not win, making to one of the finalist in a national competition is an achievement. In my spring Senior Seminar Class as part of class requirements students were required to enter the "Global IMA Student Case Competition." One of the teams made the final four and earned a trip to Minneapolis, MN in June to compete for final ranking. At the time of this report the competition has not yet occurred. Both achievements speak well for how we are doing in preparing students for business.

MORAVIAN COLLEGE INSTRUCTOR/COURSE EVALUATION FORM (E)

Instructor _____ Course _____ Date _____

Sex: Male Female

Class: Fr So Jr Sr CGS

Please indicate the extent to which you agree or disagree with each statement below using the following scale:

| | | |
|-----------------------|--------------------------------|--------------------|
| 1 – Strongly Disagree | 3 – Neither Disagree nor Agree | 4 – Agree |
| 2 – Disagree | | 5 – Strongly Agree |

- | <u>statement</u> | <u>response</u> |
|--|-----------------|
| 1. The instructor was prepared. | _____ |
| 2. The instructor challenged me to think about the material. | _____ |
| 3. The instructor communicated effectively with the class. | _____ |
| 4. The instructor was respectful of students' ideas. | _____ |
| 5. The instructor graded students fairly. | _____ |
| 6. In general, this course was taught very well. | _____ |
| 7. I worked hard in this class. | _____ |
| 8. Active participation was encouraged in this class. | _____ |
| 9. I discussed the material from this course outside of class with other students. | _____ |
| | |
| 10. On average, I worked approximately _____ hours a week outside of class meetings in preparing for this class (time includes homework, reading, studying, writing of papers, preparation of labs/ scores/ artwork, etc.) | _____ |
| | |
| 11. This course enhanced my ability to: | |
| a) consider the ethical implications of decisions | _____ |
| b) apply critical thinking skills in decision making | _____ |
| c) integrate concepts and methods from a variety of disciplines | _____ |
| d) consider global perspectives when evaluating issues | _____ |

I. *Indicate those aspects of the course which you would encourage the instructor to continue in future courses.*

II. *Indicate ways in which the instructor might improve the course in future semesters.*

III. *Use the space below to make any additional comments.*

PLEASE DO NOT WRITE ON OTHER SIDE OF SHEET