IU Division of Business  
IUPUC  
Assurance of Learning Report for Spring 2011  
September 7, 2011  
BS in Business Program at IUPUC

SUMMARIZED RESULTS

<table>
<thead>
<tr>
<th>Results from Assessments and Discussion</th>
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<tr>
<td><strong>INDIRECT</strong> – Overall ratings on most items measured in the survey were relatively high. Scores were greater than 4 (out of 5) for nearly all variables except quality issues in non-business classes and those associated with internship help and availability. Survey results also gave us some formal inputs on preferences for schedules and online vs. hybrid courses.</td>
<td><strong>This was the first formal survey. Continue conducting this on graduating students in J401 each semester.</strong></td>
</tr>
<tr>
<td><strong>SLO 1.a</strong> – I-Core students could complete business memos, mostly with only minor editing needed. We were surprised to find a few, however, who did not seem to know the style and use for business memos. 2/14 needed major editing and improvement in written communication.</td>
<td><strong>Emphasize to I-Core students the resources available to them online, such as sample memos.</strong></td>
</tr>
<tr>
<td><strong>SLO 2.a</strong> – Overall, it appears as though SP2011 students (80% average) performed more poorly than did FA2010 students (87% average) on the Board Games simulation and role play. The comparison is difficult, however, because the simulation changed in a few significant ways. In addition, we tightened up evaluation in SP2011 compared to FA2010 as we grew more confident with the team-taught integrated course.</td>
<td><strong>The same simulation (except for Unit 3) is used for FA2011, which should give us better comparison. With the curriculum change, I-Core will no longer be taught as an integrated whole, however.</strong></td>
</tr>
<tr>
<td><strong>SLO 3.a</strong> – What trends are apparent show improvement in most measures in SP2011. And it appears as though the analytical variables – financial, marketing and operations management – are the weakest. Otherwise, it isn’t clear to us what this data shows just yet.</td>
<td><strong>This is the first time we have looked at this data formally for the BS in Business program. We now need to investigate with the author of the Business Strategy Game to gain some better understanding of what the results mean.</strong></td>
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</table>
OVERVIEW AND BACKGROUND

The first full set of student learning outcomes (SOLs) for the BS in Business was established in 2008-2009 and mapped to the emerging Principles of Undergraduate Learning (PULs) from IUPUI. That 2009 set included 10 SLOs and 27 different assessment points. It was too complex, particularly since we were just starting out with assessment.

This version of the AOL plan was included in the application for AACSB candidacy in December 2009. The first formal assessments and report on assurance of learning was for academic year 2009-2010 and written in spring 2010 and submitted to PRAC at IUPUI.

The complexity became apparent as we tried to assess the various parts. By December 2010, the Undergraduate Policy and Curriculum Committee reduced the SLOs down to just six, mirrored after the PULs. This meant that all assessment for the BS in Business could also directly inform the PULs.

These (December 2010) SLOs are still in use.

2010-2011 Curriculum Change:
The primary work of the undergraduate committee during academic year 2010-2011 was to revise the BS in Business curriculum. The changes were driven by both direct and indirect assessments, and occurred roughly 10 years after the degree program was initiated at IUPUC. (Some minor changes had been implemented in previous years, however.)

Major changes of the new curriculum:
- Simplified the degree structure so that students could better understand requirements and see the path to completion more clearly.
- Reduced required credits to 120 from 124.
- Simplified the quantitative literacy requirements as an interim path toward creating our own quantitative methods course.
- Created space for more open electives.
- Eliminated concentrations with little student demand or supported by few AQ faculty.
- Included an ethics and social responsibility course.
- Included a required internship, research project or study abroad experience.

The new curriculum was approved by business faculty and IUPUC Faculty Senate. It takes effect January 2012.

As a result of so much effort devoted to curriculum changes, AOL in the undergraduate program 2010-2011 was limited to I-Core and J401. In addition, in
spring 2011 we conducted our first formal Student Satisfaction Survey. The results of that survey suggested some indirect assessment results.

BS in BUSINESS STUDENT LEARNING OUTCOMES

The Division of Business has adopted as its program learning outcomes the Principles of Undergraduate Learning (PULs) in place for all undergraduate programs at IUPUC and IUPUI. What follows below are these program outcomes, with directions for assessments that are aimed specifically at business studies.

1. Core Communication and Quantitative Skills (Foundation Skills)

   **Upon completion of the program, students are able to:**
   1.1 Write, read, speak and listen.
   1.2 Develop and deliver effective presentations.
   1.3 Perform quantitative analysis.
   1.4 Use information resources and technology.

   *What we will assess in business:*
   1.a Effectiveness of business memos to communicate results of business analyses, strategies and recommendations.
   1.b Effectiveness of individual and group presentation skills.
   1.c The ability to use quantitative methods to analyze business and economic data.

2. Critical Thinking Skills

   **Upon completion of the program, students are able to:**
   2.1 Analyze information and ideas carefully and logically from multiple perspectives.

   *What we will assess in business:*
   2.a The ability to identify problems, develop feasible solutions, and then choose from alternatives.

3. Integration and Application of Knowledge

   **Upon completion of the program, students are able to:**
   3.1 Use information and concepts from studies in multiple disciplines in their intellectual, professional, and community lives.

   *What we will assess in business:*
   3.a The ability to work effectively as a business manager who harnesses skills and knowledge from across the key business disciplines.
   3.b Productive participation in a team and meaningful contribution to team goals.
4. **Intellectual Depth, Breadth, and Adaptiveness**

*Upon completion of the program, students are able to:*

4.1. Examine and organize disciplinary ways of knowing and to apply them to specific issues and problems.

*What we will assess in business:*

4.a The ability to use the primary analytical tools and decision-making skills in at least one key business discipline to identify problems and develop solutions.

5. **Understanding Society and Culture**

*Upon completion of the program, students are able to:*

5.1. Demonstrate the ability to recognize their own cultural traditions and to understand and appreciate the diversity of the human experience, both within the United States and internationally.

*What we will assess in business:*

5.a The ability to analyze strategic issues and make strategic decisions within a global context.

6. **Values and Ethics**

*Upon completion of the program, students are able to:*

6.1. Make judgments with respect to individual conduct, citizenship, and aesthetics.

*What we will assess in business:*

6.a The ability to make informed and principled choices regarding conflicting situations.

**RESULTS AND RECOMMENDED CHANGES**
<table>
<thead>
<tr>
<th>PUL/Program Outcome</th>
<th>Business Assessment</th>
<th>Program Assessment Points (Determined by UPC Committee)</th>
<th>Assessment Tool</th>
<th>2010-2011 Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Core Communication and Quantitative Skills (Foundation Skills)</td>
<td>1.a Effectiveness of business memos to communicate results of business analyses, strategies and recommendations.</td>
<td><strong>SP2011</strong>: I-Core (F301, M301, P301)</td>
<td>Evaluation of a memo transmitting analysis and recommendations on an analysis of a real company.</td>
<td>We did not use a formal rubric for this assignment. Evaluation of the memos, however, showed that of the 14 students in the course, 10 of them wrote and formatted effective memos with only minor edits needed. 2 needed revised memos for formatting, but were acceptably written. 2 others were poor both on memo style and on written communication.</td>
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</table>
### PUL/Program Outcome

#### Business Assessment

<table>
<thead>
<tr>
<th>Program Assessment Points (Determined by UPC Committee)</th>
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<tr>
<td>FA2011: I-Core (F301, M301, P301)</td>
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</table>

#### Assessment Tool

Summary results from 9 units of the role-play simulation exercises.

#### 2010-2011 Results

These summarized results are reproduced below. Comparisons with FA2010 are limited, since the simulation was revised in significant ways. But there was a large difference overall:

- SP2011: 80% average across units
- FA2010: 87% average across units

Improvement of student problem-identification and solution development, however, was indicated by the relative movement of most students from the 70s to 80s range into the 80s to 90s range by the end of the simulation.

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### Frequency Distribution of Student Performance

“Board Games” Simulation and Role Play

<table>
<thead>
<tr>
<th>Unit 1</th>
<th>Unit 2</th>
<th>Unit 3</th>
<th>Unit 4</th>
<th>Unit 5</th>
<th>Unit 6</th>
<th>Unit 7</th>
<th>Unit 8</th>
<th>Unit 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>9</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>80-89</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>8</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>70-79</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>60-69</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>&lt; 60</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

| SP2011 Means: | 71 | 82 | 80 | 85 | 88 | 79 | 68 | 81 | 87 | 80 |
| FA2011 Means:* | 83 | 90 | 90 | 91 | 93 | 77 | 86 | 89 | 84 | 87 |

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**Note:**
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<tr>
<td>3. Integration and Application of Knowledge Upon completion of the program, students are able to: 3.1 Use information and concepts from studies in multiple disciplines in their intellectual, professional, and community lives.</td>
<td>3.a The ability to work effectively as a business manager who harnesses skills and knowledge from across the key business disciplines.</td>
<td>SP2011: J401 – Administrative Policy</td>
<td>Summary data from team competition in BSG simulation.</td>
<td>The results from the last 5 iterations of the Business Strategy Game (BSG) at the undergraduate level are in the chart that follows. It is difficult to find trends that appear independent of the particular student cohort. Although declines over many variables seem to have been reversed in SP2011. Otherwise, there is great variability both across the various offerings of the course and across the variables. Overall, the analytical portion – financial, marketing and operations management – appear to be lower than the non-analytical variables, such as leadership, teamwork, and collaboration. As with the MBA results, performance may be more dependent on the particular cohort of students than on other variables we control. Also as with the MBA, we need to investigate a better understanding of these percentile rankings.</td>
</tr>
</tbody>
</table>
**SUMMARIZED RESULTS**

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<td><strong>INDIRECT</strong> – Overall program ratings from graduating students were good. Highest was the degree to which the program challenged students intellectually (89.5% rated 4 or 5 out of 5). Lowest was amount of work required to obtain a B+ (52.6% said average to little work). Comments and debriefing with students highlighted frustration with the wide range of quality and prep of cohort members; we need to improve the academic profiles of the incoming cohorts.</td>
<td>This was the first formal survey. Continue for comparisons and to look for potential change associated with the new modular program. Introduction of an “Admissions Index” in 2010-2011 will improve decision-making and help track profile data. New marketing plan for 2010-2011 improved the profile and narrowed the ranges.</td>
</tr>
<tr>
<td><strong>SLO 4.a and 4.b</strong> – Revise the assignment and rubric for ethical thinking and decision making in order to more appropriately assess that outcome. Introduce initial principles of ethics and ethical thinking earlier in the program.</td>
<td>Done for J506 offered in the spring 2012 and for Module 6 in summer 2012. Planned for Module 2, which will be offered in the spring 2012 semester.</td>
</tr>
<tr>
<td><strong>SLO 3.b</strong> – Review either the assignment or the rubric to help MBA faculty better see student performance on confronting change. Since student performance was mostly superior, either the rubric could use some adjustment to better differentiate student performance or the assignment expectations can now be raised.</td>
<td>Now part of to Module 1 offered in fall 2011 semester. Also measure critical thinking in Module 2 and Module 5, associated with the NFP Project.</td>
</tr>
<tr>
<td><strong>INDIRECT</strong> – Re-balance graded work and activities throughout the new modular program to provide more evidence of individual student assessments rather than group assessments.</td>
<td>Already emphasized in the modular curriculum.</td>
</tr>
<tr>
<td><strong>SLO 1.a</strong> – Over last three years, Business Strategy Game (BSG) results shows mixed results over both time and variables. We need to (a) investigate use of this data for assessment purposes with the author of the BSG, and (b) continue to look at this over at least two iterations of the new modular curriculum.</td>
<td>First time we have looked at this data. The second iteration of this will be when the Bravo Cohort completes Module 6 in summer 2013. Contact BSG author for assistance prior to Spring 2012 BSG.</td>
</tr>
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</table>
OVERVIEW AND BACKGROUND

This was the second year of formal assurance of learning work for the IU MBA Program at IUPUC. During 2009-2010, Division faculty established six learning outcomes and conducted specific assessments to address SLO #1, management knowledge and skills. This limited focus on one outcome was designed in part to simplify faculty gaining experience with assessment and in part a response to what at the time was a year-long curriculum review. The existing curriculum had remained essentially the same since it was first implemented in 2001. Spearheaded by a subcommittee of the Business Advisory Council (BAC), the curriculum review included much indirect assessment:

- Surveys and interviews with alumni and regional business managers and executives.
- Surveys of then existing MBA students.
- Study of profiles of competing and peer MBA programs.
- A review of recent literature and commentary on MBA programs.

The BAC formally handed over the program review and recommendations to Division faculty in March 2010, and by June 2011 the MBA Policy and Curriculum Committee had established a modular, integrated curriculum for part-time study that reduced the time-to-completion to 24 months from 33 months. This curriculum was implemented with the fall 2010 academic year.

Assurance of learning for academic year 2010-2011 involved these items:

- A revision of the student learning outcomes that reduced the SLOs to five from six and mapped each to the draft Principles of Graduate Learning at IUPUI.
- Direct assessments of (a) ethical thinking and decision making, (b) general management knowledge, skills and leadership, and (c) critical thinking.
- Formal indirect assessment with a Student Satisfaction Survey of the graduating cohort.

Finally, MBA faculty convened in May 2011 to discuss the results of assessments and to agree to changes that might lead to improvements in outcomes. Faculty recognized we are both learning how to become more proficient with assessment, and developing assurance of learning processes and habits, while still working with two versions of the MBA curriculum. The results and changes are documented in the Summary of Results above and the detailed tables that follow.

MBA STUDENT LEARNING OUTCOMES

1. General Management Knowledge, Skills and Leadership
   1.1 Demonstrate an ability to use cross-functional knowledge and skills to effectively manage projects and operations.
1.2 Participate productively in groups and teams, and demonstrate contributions to team goals.
1.3 Demonstrate a capacity both to lead others to achieve organizational goals and to support effective leadership.

*IUPUI/IUPUC PGL addressed: Demonstrate the knowledge and skills needed to meet disciplinary standards of performance, as stated for each individual degree.*

2. **Effective Communication**
   2.1 Communicate complex analyses, recommendations, strategies, and visions in ways that lead to clarity of purpose and effective decision-making.

   *IUPUI/IUPUC PGL addressed: Communicate effectively with their peers, their clientele, and the general public.*

3. **Critical Thinking**
   3.1 Demonstrate an ability to apply cross-functional knowledge and skills to analyze problems, prioritize issues, and develop effective responses.
   3.2 Demonstrate an ability to apply cross-functional knowledge and skills in unfamiliar, or unexpected, situations in order to adapt to change and develop innovative responses.

   *IUPUI/IUPUC PGL addressed: Think critically and creatively to improve practice in their field.*

4. **Ethical Thinking and Decision-Making**
   4.1 Establish a set of ethically valid professional values and demonstrate how those values apply to situations and trade-offs business managers may confront.

   *IUPUI/IUPUC PGL addressed: Meet all ethical standards established for the discipline.*

5. **Management in a Social Context**
   5.1 Identify strategic stakeholder issues and frame decision-making within the social, political and cultural contexts of local and global communities.

**DETAILED RESULTS AND RECOMMENDED CHANGES**
<table>
<thead>
<tr>
<th>Program Outcome</th>
<th>What We Will Assess...</th>
<th>Where We Will Assess...</th>
<th>Assessment Tool</th>
<th>Results</th>
</tr>
</thead>
</table>
| 1. **General Management Knowledge, Skills and Leadership**<br>Upon completion of the program, students are able to: | 1.a The ability to conduct business analyses that lead to effective decision-making. | **SP11**: *D594-Competitive Strategy in Global Industries* | Summary data from team competition in BSG simulation. | See 3-year trend results in the chart below. Changes:  
- Continue tracking this data through two iterations of new modular curriculum (summer 2013) to look for emerging differences.  
- In particular, look for improvements in marketing, finance and operations management as a result of integrated Module 4. |
| 1.1 Demonstrate an ability to use cross-functional knowledge and skills to effectively manage projects and operations. | | | | |
| 1.2 Participate productively in groups and teams, and demonstrate contributions to team goals. | | | | |
| 1.3 Demonstrate a capacity both to lead others to achieve organizational goals and to support effective leadership. | | | | |
Class Averages of BSG Results - MBA D594
Percentiles vs. All Participants Worldwide Last 12 Months

- Leadership, Collaboration, Teamwork
- Fin Analysis, Fin Mgmt, Ops Mgmt, Mktg Mgmt, HR Mgmt, Strategic Analysis, Planning, Corp Social Resp

- Spring 2009
- Spring 2010
- Spring 2011
<table>
<thead>
<tr>
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<th>Assessment Tool</th>
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</thead>
<tbody>
<tr>
<td>4. Ethical Thinking and Decision-Making</td>
<td>4.a The ability to articulate a set of appropriate values at work in a professional setting.</td>
<td>SP11: J506-Leadership and Ethics</td>
<td>Rubric-based evaluation of a Core Values identification assignment.</td>
<td>See summary results from the rubric below. Changes: Faculty thought the assignment and rubric needed revision in order to better address the two outcomes. This will be reworked for spring 2011 in J506 and then for the summer version in Module 6. Results of the assignment as is, however, and discussion with instructors, highlighted a need for introduction of ethical thinking and principles earlier in the program. We will do that in part in Module 2 beginning spring 2012.</td>
</tr>
</tbody>
</table>
| 4.1 Establish a set of ethically valid professional values and demonstrate how those values apply to situations and trade-offs business managers may confront. | 4.b The ability to identify ethical issues and to chart a course of action in confronting them. | SP11: J506-Leadership and Ethics | **Identification and definition of core values:**

- Mean: 12.6/15
  - 14-15 points 33.3%
  - 12-13 points 42.2%
  - 10-11 points 24.4%
  - <10 points 00.0%

- **Explanation of why core values were chosen:**

  - Mean: 17.1/20
    - 18-20 points 46.7%
    - 16-17 points 31.1%
    - 14-15 points 22.2%
    - <14 points 00.0%

- **Description of management systems, processes:**

  - Mean: 20.6/25
    - 23-25 points 37.8%
    - 20-22 points 28.9%
    - 17-19 points 20.0%
    - <17 points 13.3%

**Totals:**

- Mean: 49.3/60
  - 54-60 points 28.9%
  - 48-53 points 42.2%
  - 42-47 points 24.4%
  - 36-41 points 04.4%
  - <36 points 00.0%
## Program Outcome: Critical Thinking

**Upon completion of the program, students are able to:**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>3.1 Demonstrate an ability to apply cross-functional knowledge and skills to analyze problems, prioritize issues, and develop effective responses.</td>
<td>3.b The ability to confront environmental and operational change when it appears and to respond effectively.</td>
<td><strong>SP11: WS16 – Organizational Development and Change</strong></td>
<td>See summary results below.</td>
</tr>
</tbody>
</table>

**Changes:** The assessment rubric appears to address well teamwork and collaboration, demonstrated expertise, and peer evaluation. The second item – expertise – is the rating that suggests a measure of critical thinking. It is only 100/450 of the assignment points, however. Some revision to the assignment, or a new rubric that is richer about confronting change, would be more informative for assessment purposes.

These results suggest students performed exceptionally well. 6 received perfect scores on demonstrated expertise; 13/18 (72.2%) received scores at 90% or above of available points. A revised rubric might help differentiate student performance, or given these results, the expectations can be raised.

We should also look for other measures of the two critical thinking SLOs in the program.

### Evaluation of teamwork and collaboration:

<table>
<thead>
<tr>
<th>Mean: 282/300 (94.0%)</th>
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</thead>
<tbody>
<tr>
<td>280-300 points 94.1%</td>
</tr>
<tr>
<td>240-289 points 0.0%</td>
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<tr>
<td>200-239 points 5.9%</td>
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<tr>
<td>&lt;199 points 0.0%</td>
</tr>
</tbody>
</table>

### Writing, expertise applied, recommendations:

<table>
<thead>
<tr>
<th>Mean: 87.5/100 (87.5%)</th>
</tr>
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<tbody>
<tr>
<td>100 points 33.3%</td>
</tr>
<tr>
<td>90-99 points 38.9%</td>
</tr>
<tr>
<td>80-89 points 22.2%</td>
</tr>
<tr>
<td>&lt;80 points 5.6%</td>
</tr>
</tbody>
</table>

### Peer Evaluations:

<table>
<thead>
<tr>
<th>Mean: 46/50 (92.0%)</th>
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</thead>
<tbody>
<tr>
<td>50 points 82.4%</td>
</tr>
<tr>
<td>46-49 points 5.9%</td>
</tr>
<tr>
<td>41-45 points 0.0%</td>
</tr>
<tr>
<td>&lt;41 points 11.8%</td>
</tr>
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</table>