

## SECTION A

Institutional Effectiveness:  
Department of Arts and Sciences Outcomes Assessment Model for Academic Years 2008-2010

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**ABSTRACT**

This study reports and analyzes the results of a test pilot of outcomes assessment for a general education program. The program assessment strategy of Embry Riddle Aeronautical University uses the Program Outcomes Curricula Matrix developed by the Department of Arts and Sciences. The University's Institutional Research unit will use all assessment plans and results for strategic planning purposes. This project is also intended to be an integral part of the Department of Arts and Sciences Southern Association of Colleges and Schools reaffirmation of 2012. Although the number of courses chosen for the initial test is small, half of the program outcomes identified by the Faculty were assessed. The test pilot seeks to evaluate the effectiveness and ease of using Blackboard as a tool for program assessment.

### *Introduction*

Consistent with its mission in education, Embry-Riddle Aeronautical University embraces a general education program, which ensures that students possess the attributes expected of all university graduates (ERAU, 2005 ). The general education program enables students, regardless of their degree program, to understand the significance of acquiring a broad range of knowledge. Throughout the general education program, students gain and enhance competence in written and oral communication. They practice reasoning and critical thinking skills and demonstrate computer proficiency. As students engage in this course of study, they familiarize themselves with and investigate ideas and methodologies from several disciplines. Candidates for bachelor degrees must complete course work or demonstrate competency in the following areas: English, Mathematics, Physical Sciences and Social Sciences and Economics. The program also helps students recognize interrelationships among the disciplines. Promoting the appreciation of varied perspectives, the general education program provides intellectual stimulation, ensuring that students are broadly educated. This course of study strives to empower students to make informed value judgments, to expand their knowledge and understanding of themselves, and to lead meaningful, responsible, and satisfying lives as individuals, professionals, and concerned members of their society and the world.

### *Program Assessment Plan*

The general education program encourages effective learning and provides a coherent base for students to pursue their academic specializations. To measure the effectiveness of this program, the University funding an assessment grant using the Program Outcomes Curricula Matrix developed by its Department of Arts and Sciences and ideas accumulated from presentations of sample assessment plans

presented at the Economics Teaching Conference at Robert Morris University and an ERAU Assessment workshop (Andoh & Eldridge, 2006, Katip, 2006 and Wilson, 2006). All assessments in this plan are direct assessments of the student's knowledge. The full-time Arts and Sciences Faculty began setting the foundation for a formal assessment program in April 2007 through indirect assessment of students using alumni and employer survey data. Findings from these surveys were incorporated into the general education curriculum, which laid the groundwork for the current assessment plan.

The first step in the formal assessment process was to construct a mission statement and program outcomes (PO) for the Department of Arts and Sciences (ERAU, 2007). The mission statement reads, "The mission of the Department of Arts & Sciences is to promote in students the development of competency in inquiry and problem-solving skills, communication skills, and ethical interaction with the contemporary social world. This mission is accomplished through the achievement of encompassing and mutually informative core outcomes in the following areas: Critical Thinking, Quantitative Reasoning, Information Literacy, Communication, Scientific Literacy, and Life-Long Personal Growth."

The Faculty then identified 14 program outcomes (POs) which represent what the Department believe students will be able to demonstrate after taking some mix of the 61 courses within the department. A list of Program Outcomes for general education follows.

- PO1 - Apply knowledge of college level mathematics to defining and solving problems;
- PO2 - Apply statistical methods in the analysis and interpretation of data for the purpose of drawing valid conclusions relating to the solutions of problems;
- PO3 - Communicate ideas in written form in both technical and non-technical areas;
- PO4 - Communicate ideas in non-written form, such as through oral presentations or visual media;
- PO5 - Recognize the importance of professional, ethical and social responsibility;

- PO6 - Understand the natural world, to include the impact of the environment on aerospace operations and aerospace operations on the environment, as well as everyday life and professional experiences;
- PO7 - Use digitally-enabled technology to organize and manipulate data, perform calculations, aid in solving problems, and communicate solutions, ideas, and concepts;
- PO8 - Use scientific information in critical thinking and decision-making processes;
- PO9 - Function on multi-cultural and/or multi-disciplinary teams;
- PO10 - Apply economic principles to identify, formulate, and solve problems within professional and personal environments;
- PO11 - Identify and participate in professional and personal development activities through organizations and self-directed learning;
- PO12 - Understand contemporary issues in society
- PO13 - Recognize the complexity and diversity of the human experience, including cultural, aesthetic, psychological, philosophical, and spiritual dimensions;
- PO14 - Conduct and report research in accordance with professional standards.

The faculty then created a large matrix that maps all 61 courses and their learning objectives (LO) to the program outcomes.

*Test Pilot Project: 2008-2009*

As an integral part of the Southern Association of Schools and Colleges (SACS) reaffirmation of 2012, the Department embarked on a test pilot project in the 2008-2009 academic year based on the Nichols' five step model of assessment (Nichols & Nichols, 2005) . The objective is to develop the first cycle of direct assessment of students and to identify related quality improvements based on a critical analysis of the results.

Blackboard's Outcomes System was used as a tool to deliver student assessment. The author and project administrator went to a two-day training session and had *carte blanche* access to two Blackboard, Inc. consultants, who were key to actually delivering the assessment tools. The test pilot will determine the effectiveness of Blackboard Outcomes for direct assessment of program outcomes across campuses.

Results from the baseline assessment will be used to document improvements in academic quality, and guide the development of the assessment process for courses within the Department of Arts and Sciences.

#### *Initial POs to be Assessed*

For the 2008-2009 academic year, the Faculty decided to assess Program Outcomes PO1, PO2, PO6, PO10, PO12, PO13 and PO14 via a selection of eight courses from the Department of Arts and Sciences. This grouping of courses titled Indicator Courses is taught frequently, thus eventually allowing for direct student assessment of all 14 Program Outcomes. Moreover, these courses represent the knowledge and skills sets students need to succeed in the upper level courses and other degree programs are represented by these courses. The Indicator courses include two courses from each program in the Department of Arts and Sciences: Math, English, Physical Sciences, Social Sciences and Economics. Following is a rationale of why each course was chosen as an Indicator Course.

The Math courses selected are integral to upper level studies. Additionally, to be successful in today's work environment, workers must be able to apply appropriate statistical techniques to analyze data and to draw valid conclusions from the data. Students need to be critical consumers of the statistical data they read or hear in the media and be able to discern whether reported conclusions are valid or not.

English courses were selected for their preparation of students for upper level course work. In the majority of their courses, students are required to write at least one research paper. The learning outcomes of English courses specifically include supporting thesis statements with appropriately documented

evidence. Additionally, because audience analysis is crucial to all technical communications, mastery of this item is central to all types of documentation throughout the students' academic and work career. As a technically-oriented institution, awareness of the humanistic side of life experience is an important balance for our students

Physical Sciences courses selected because problem solving is one of the top ten skills indicated as important based on results of the recent employer and alumni survey data. In addition, this skill is also an Aviation Accreditation Board International (AABI) indicator and students in the Bachelor of Science in Professional Aeronautics (BSPA) and the Bachelor of Science in Aviation Maintenance (BSAvM) programs will need to develop this skill. Additionally, students in the BSPA and BSAvM programs will need to develop an understanding of the impact of weather on aviation operations.

Social Science and Economics courses were selected to assess how well students are able to apply theory and skills learned in these courses to understanding contemporary social and economic issues.

Finally, the Faculty developed the mini matrix shown in Table 1 to link each of the eight Indicator Courses to the seven program outcomes to be assessed.

Table 1

*Indicator Course Group 1 Program Outcome Matrix*

Indicator Course	Program Outcomes Assessed**						
	PO1	PO2	PO6	PO10	PO12	PO13	PO14
1. PHYS 102	x						
2. WEAX 201			x				
3. ENGL 123							x

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1. PHYS 102	x						
2. WEAX 201			x				
3. ENGL 123							x



4. ENGL 221						X	
5. MATH 111	x						
6. MATH 211		x					
7. ECON 210				x			
8. SOCI 210					x		

*\*\*Core competencies measured: Critical Thinking, Quantitative Reasoning, and Communication.*

*Course Assessment Tools*

Learning Outcomes was directly assessed using a variety of tools. Details for each Indicator Courses follow.

- MATH 111 – College Math for Aviation 1: Students were given a short set of test questions to be embedded in the course and used in the student’s final grade calculation.
- MATH 211 – Statistics with Aviation Applications: Students completed online selected problems from *MyStatLab*, an online learning support tool. Results from the selected problems were used in the student’s final grade
- PHYS 102 – Explorations in Physics: Data on student performance is to be gathered and analyzed to determine whether students have learned the concepts being tested. The exam addressed LO 1 and LO 2 in the PHYS 102 course outline. The results of the exams should attain a goal of 90% of the students achieving 80% or higher on the assessment test. If this goal is not achieved, a faculty discussion will be conducted on how to improve student performance that is associated with the learning outcome addressed.
- WEAX 201 – Meteorology 1: A multiple choice question test with 6 – 10 questions was developed that requires students to identify hazards to aviation associated with weather systems

during the four seasons. The exam addressed LO 5 in the WEAX 201 course outline. The results of the exams should attain a goal of 90% of the students achieving 80% or higher on the assessment test. If this goal is not achieved, a faculty discussion will be conducted on how to improve student performance that is associated with the learning outcome addressed.

- ENGL 123 – English Composition: An existing assignment in the Online course requires students to create an annotated bibliography was mandated for use in the chosen Face to Face (F2F) sections of this course. This assessment was primarily an application type, but also included comprehension (description of the type of information) and evaluation (evaluation of the usefulness of the source). Students were required to find seven sources and three types of sources of information on a topic of their choice; prepare a references list in APA style; and include annotations for each source, describing the type of information found in the source and giving an evaluation of the usefulness of the source. This assignment provides direct assessment of student learning related to PO 14.
- ENGL 221 – Technical Report Writing: An existing assignment in the Online course requires students to analyze an audience was mandated for use in the chosen F2F sections of this course. Students completed the assignment and were graded by the instructor given a provided rubric. Scores were categorized into poor (0-20 points), satisfactory (21-25 points) and superior (26-30 points).
- SOCI 210 – Introduction of Sociology: The course requires students to write a term paper on a contemporary issue in society. Papers were graded on their explanation and understanding of the issue using a provided rubric that assessed their explanation and understanding of the issue, as well as research and documentation. A student passed the course only if he or she earned a rating of “satisfactory” on this paper.

- ECON 210 – Microeconomics: The departmental outline prescribes that all class sections require a term paper. Fifty percent of the grade on this paper is based on the student's ability to apply economic principles listed among the learning objectives of the course, and ability to identify, formulate, and solve problems within a professional or personal environment. This is a summative assignment for the course and represents 30 percent of the student's course grade. By picking such an important assignment as an assessment, we are confident that student's would present their best work and knowledge gained in this class. Students completed the assignment and the content portion of the term paper was recorded separately by the instructor given a provided rubric. Scores were categorized by poor (0-32 points, satisfactory (32-44 points) and superior (45-50 points).

To conduct course-level assessment, discipline chairs chose three instructors per Indicator Course from pool of October 2008 term instructors across all campuses. At minimum, one should have been an online section of the indicator course. Instructors were mandated to require the selected assessment tool as a graded activity in the student's final grade. Discipline and Associate Discipline Chair had access to participating instructor's Blackboard courses to review and record results of the assessment. Course Monitors were charged with analyzing the results and recommending appropriate changes in various the course outlines.

### *Lessons Learned Thus Far*

This being a test pilot, the author would have been surprised if all assessment plans progressed as originally planned. The following are some of the general lessons that need to be incorporated into the broader Assessment Plan for the University:

- 1) Not every indicator courses was taught as frequently as the author expected. Therefore, the author substituted SOCI 310 for SOCI 210 to measure PO12 because there were three sections of that course taught during the October 2008 term.
- 2) Instructor response also was mixed after initial excitement and volunteering for this project. Some instructors did not welcome the top down approach of using assessment assignments created by someone else. Other instructors also do not believe administration's impetus for this project; wondering if it is a back door or passive instructor evaluation tool.
- 3) The author likes the functionality, output, archiving and reporting of Blackboard Outcomes as a tool to conduct the assessment process. However, the author was not prepared for the amount of guidance and hand holding that Discipline Chairs, course instructors and students needed during this test program.

### *Curriculum Improvements*

The following are the course specific results of the baseline assessment and specific curricular improvements implemented in each course based on the analysis of the inaugural outcomes assessment for each class.

- MATH 111 – College Math for Aviation 1: The test will be changed to a ten-item test to match the other weekly quizzes in the course. In the selected sample of classes, the assessment test will replace the quiz for week eleven. Since it is required and will count for 2.5% of the final grade, motivation should be improved and more students will probably take the test. The four items added to the test will be at the comprehension level rather than the application level. Some students may understand the concepts, but may not have had sufficient work experience to apply them to real-world problems. The first six questions will still test LO at the application level.

- MATH 211 – Statistics with Aviation Applications: More emphasis will be placed on the characteristics of the binomial distribution and the need to consider those characteristics when computing probabilities. More emphasis will be placed on methods of distinguishing the two types of problems and techniques for computing associated probabilities. More emphasis will be placed on methods for identifying which hypothesis tests are appropriate for given situations and on hypothesis testing methodology.
- WEAX 201 – Meteorology 1: Developed an instructor memo that included the course topics, by chapter that contained the primary topics that are associated with weather impacts on aviation operation: ground operations; take off and landing operations; and flying Enroute at altitude. For each chapter, instructors will engage the students in discussions of the following items: Chapter 5: Clouds: Define Instrument Flight Rules (IFR) and Visual Flight Rules (VFR) by ceiling and visibility constraints. Discuss the types of clouds that are conducive to aircraft icing: liquid water; temperature  $< 0$  C and turbulence. Discuss what constitutes aviation ground operations; take off and landing operations and Enroute at altitude. Chapter 7: Precipitation: When covering the various types of precipitation (especially winter precipitation: freezing rain; snow; aircraft icing; etc.) engage the students in a discussion of the effects on aviation ground operations; take off and landing operations and Enroute at altitude. Chapter 9: Local Wind Systems: When covering the various types of local wind systems engage the students in a discussion of the effects on aviation ground operations; take off and landing operations and Enroute at altitude. Chapter 10: Jet Stream: When covering the section on the jet stream, engage the students in a discussion of the effects on aviation operations at Enroute at altitudes. Chapter 11: Fronts: When covering the types of fronts (especially wintertime warm fronts with precipitation such as freezing rain; snow; aircraft icing; etc. and springtime cold fronts with associated weather phenomena such as gusty surface winds,

wind shear, etc) engage the students in a discussion of the effects on aviation ground operations; take off and landing operations and Enroute at altitude. Chapter 14: Thunderstorms: When covering the types of thunderstorms and thunderstorm systems like squall lines (especially hail, downdrafts, microbursts, gust fronts, extensive squall lines covering several states, etc) engage the students in a discussion of the effects on aviation ground operations; take off and landing operations and Enroute at altitude.

- ENGL 123 – English Composition: The rubric will be revised to correct the scoring calculation so that it may be used to grade the assignment as a whole. More emphasis will be placed on placing sources in alphabetical order, on checking the mechanics of documentation, and on how to find specific details for documenting electronic and unusual sources.
- ENGL 221 – Technical Report Writing: The assignment does fulfill the learning objective; however, instructors could be encouraged to give additional emphasis to correcting errors in grammar, spelling and usage.
- PHYS 102 – Explorations in Physics: Reviewed all PowerPoint slides for the course and ensure there are examples of problems that demonstrate how to solve physics problems in multiple steps. Reviewed all PowerPoint slides for the course and ensure there are discussions of physical concepts that are most important in every chapter. Have instructors emphasize the process of solving problems that starts with getting all of the variables identified, the values of the known variables and how to solve literal equations for the unknown variable. At that point it is relatively straight forward process to substitute the known values for variables and solving for the value of the unknown variable. Instructors need to remind students NOT to round off values during intermediate steps when solving problems. Instructors need to direct students to the videos that show students how to solve physics problems. Reorganized the online PHYS 102 course in

February 2009 to reduce the amount of work in the early modules and spread the work more evenly throughout the course. We also provided instructors an assessment of what physics concepts the students needed to work on based on assessment data. Finally, we revised the PHYS 102 course outline to provide instructors a schedule of activities from the online course that can be adapted to delivering the course in the classroom.

- SOCI 210 – Introduction of Sociology: No analysis report or curriculum improvement reported as of this writing.
- ECON 210 – Microeconomics: Revised course outlines as of March 1, 2009 to indicate that the specific term paper assignment is required in every class of Microeconomics. Revised course outline as of March 1, 2009 to include the specific grading rubric for the term paper. Revised online courses to include the term paper rubric required for grading to instructors and students. Address the communication and assurance of adherence to the course outline directions at the Department of Arts and Sciences meeting in March, 2009. Any recommendation or decision regarding campus personnel responsibilities will need to be briefed at the Faculty Senate and agreed upon by administration.

### *Reassessment*

As of this writing, Discipline Chairs are conducting the reassessment after the implementation of curricular changes. At ERAU, each course has a master course outline developed by a Subject Matter Expert (SME) from which every instructor must build his or her course. The course outline details mandatory learning objectives, any mandatory assignments, approved textbooks, supplementary resources and other teaching tools that the SME wishes to share with the faculty teaching a specific course.

Using the same assessment tools except in cases where the assessment tool was changed as a result of the initial analysis, a reassessment set of program outcomes was conducted during the May 2009 term. The results are expected to indicate the value of the changes made to the course outlines based on the assessment results in the October 2008 term. As before, Discipline Chairs chose three instructors to conduct assessments, at least one teaching an online section, for each indicator course from the pool of May 2009 term instructors across all campuses. Course Monitors will analyze the reassessment results and make any additional recommendations as appropriate.

### *Reassessment Results*

The following are the course specific results comparing the baseline assessment with the reassessment expecting and hoping that specific curricular improvements implemented in each course led to measurable improvement towards the criteria for success determined at the onset by each Course Monitor of this project.

- MATH 111 – College Math for Aviation 1: Seven students in one online class participated. Three classes were targeted for the sample, but two chose not to participate for reasons that are still unexplained. All test items were at the application (problem solving) level. More students may have mastered the course LO at the comprehensive level than at the application level. The test will be revised to include a test item for each LO at the comprehensive level while retaining the items at the application level. Second, asking students to volunteer to take the assessment test for extra credit appears to be a poor motivator since participation was low. In the future, students in the sample should be required to take the assessment and it should be counted as a part of the final course grade.
- MATH 211 – Statistics with Aviation Applications: Despite more emphasis on problem questions, on 4 of the 10 questions in the assessment, 75% of the students did not answer the questions



correctly. The Course Monitor believes that the questions are not presented using terms as they are in the curriculum. Wording will be changed to make the questions clearer to students and more in line with the wording they saw on problems in the course. This should result in improvements in scores. If scores still remain low on these items, then we will know that wording wasn't the only problem and we will be able to pursue other actions.

- WEAX 201 – Meteorology 1: After instituting an instructor/student study aid, we found that of the students who completed the assessment the first time, only 21% had a grade higher than 80% on the assessment, whereas 63% of the students taking the assessment after implementing the instructor/student aid had a grade higher than 80%. We set an overall goal of 90% of the students achieving 80% or higher on the assessment exam. When we look at the content goal that no item on the exam will have a score of less than 70% of the points available on the exam, we see that only the first question failed the criteria test. Nevertheless, the performance did improve from 57% to 65%. The results indicate a measureable improvement in student learning associated with the program outcome selected. To continue to strive to meet the criteria, we developed an instructor memo that included the course topics, by chapter that contained the primary topics that are associated with weather impacts on aviation operation: ground operations; take off and landing operations; and flying Enroute at altitude.
- ENGL 123 – English Composition: The revision to the October 2008 rubric corrected the scoring errors experienced in the baseline test.. Data show that all but one student were in the B-or-above range; in fact, all but two grades were in the A range. Thus the criteria for successful learning were met. Data on individual sections of the rubric show that students have the most difficulty with the formatting requirements (spacing, punctuation, capitalization, etc.). Comparison to the results from the October 2008 measurement of this outcome is difficult, due to changes in the

rubric. Some improvement in the October problematic areas has been shown in the percentages of those scoring Good or Excellent. Sources in alphabetical order: October, 68%; May, 89%  
Mechanics: October, 48%; May, 63%. The results of this assessment will be shared with instructors and the suggestion will be made to emphasize the need to check the mechanics of citation formatting.

- ENGL 221 – Technical Report Writing: No report submitted regarding the analysis at this writing. It is important to note that between the initial assessment and the re-measure, the Course Monitor changed because the initial one left the University for another job.
- PHYS 102 – Explorations in Physics: We had an overall goal of 90% of the students achieving 80% or higher on the assessment exam. Of the 77 students both online and in the classroom who completed the exam, only 40 out of 77 (52%) scored a grade of 80 or higher on the exam. It appears from preliminary results that students in the classroom who have the benefit of an instructor in a face-to-face learning environment seemed to do better on the exam. . Perhaps we need to look at what an appropriate overall goal should be for this assessment. The average grade on the exam for all sections was 75.77 with a median grade of 80. We may want to consider an overall goal of an average grade or use the median as a goal. In February 2009 we reorganized the online PHYS 102 course to reduce the amount of work in the early modules and spread the work more evenly throughout the course. We also provided instructors an assessment of what physics concepts the students needed to work on based on assessment data from the baseline measurement in October 2008. We reorganized the PHYS 102 course outline to provide instructors a schedule of activities from the online course that can be adapted to delivering the course in the classroom. We also changed the wording of select problems that caused confusion when read by the instructors and students alike. The rewording of the problems does not change the assessment of

learning, but rather clarifies the problem to be solved. Finally, we added hints to other select problems that should help the student reflect on what they learned in the formative activities such as the homework and discussion board problems.

- SOCI 310 – Introduction of Sociology: No reassessment conducted.
- ECON 210 – Microeconomics: No data available from this assessment. Numerous technological mishaps detracted from the recording of assessment data. The Course Monitor contacted all volunteer instructors to manually record the data in a spreadsheet for analysis. Despite initial agreements of cooperation, all instructors have ignored further communication by email and telephone and the Course Monitor does not have data for available for analysis.

Given that this was the initial direct assessment of students, results varied widely. On the academic side, improvements in the curriculum in three of the eight Indicator Courses yielded positive results in student performance. Additionally, in two of the Indicator Courses, assessments were improved to *better reflect what was covered in the course. Administratively, more obstacles presented themselves.* It is clear an assessment that is voluntary in nature leaves too large a gap for consistent program assessment to be conducted. Students choose to ignore extra work or do not put forth their full effort. Additionally, this assessment program requested that instructors volunteer to take part in the program. *In one Indicator Course, the assessment measurement could not even be conducted as volunteers ignored requests for participation. In another Indicator Course, Blackboard Outcomes did not function as it should have and requests for the data from the participating instructors have been ignored as of this writing.* Since other ERAU-WW Departments are intending to follow an assessment program modeled loosely on the Department of Arts and Sciences model, the author intends to address the inadequacy of the voluntary nature of this program for faculty and staff during the October 2009 Faculty Senate meeting. Participation and performance in the University's assessment program is a

razor’s edge problem. Nichols and Nichols (2005) noted that any sure way to leave an assessment problem in a ditch is to make performance rather than participation an element of faculty evaluations: participation is acceptable, performance is not.

*Continuing the Assessment Cycle*

For the academic year 2009 -2010, the Faculty has created an additional mini-matrix of Indicator Courses that will address the remaining Program Outcomes not assessed in academic year 2008-2009. This process is expected to commence during the October 2009 term and mirror the current process. Program Outcomes that will be assessed during 2009-2010 academic year are PO3, PO4, PO5, PO7, PO8, PO9, & PO11 via a selection of eight courses from the Department of Arts and Sciences referred to as the Indicator Courses Group 2.

By choosing the second mix of Indicator Courses, the remaining core competencies, information literacy, scientific literacy and life long growth will be measured and assessments will be developed and conducted in the 2009-2010 academic year. The knowledge and skills sets students need to succeed in the upper level courses and other degree programs are represented by this Indicator Courses Group 2. A rationale of why each course was chosen for this second group of Indicator Courses will be developed and presented in the periodic reports required in this plan.

Table 2

*Indicator Course Group 2 Program Outcome Matrix*

Indicator Course	Program Outcomes Assessed**						
	PO3	PO4	PO5	PO7	PO8	PO9	PO11
9. SPCH 219		X					
10. ENGL 143			X				

11. MATH 222				X			
12. GOVT 320	X						
13. PSYC 350					X		
14. ENGL 222						X	
15. ECON 211				X			
16. SOCI 300							X

*\*\*Core competencies to measure: Information Literacy, Scientific Reasoning, Life-Long Personal Growth*

As of this writing, assessment tools for the Indicator Course Group 2 are being compiled and coded into Blackboard Outcomes for deployment. Despite some organizational difficulties in recruiting volunteers and workload issues, the only real change is that all assessments that are used will be a significant percentage of the student’s grade. During the pilot year of assessment, some course assessments were made available to students as a voluntary assignment for extra credit. Students either opted not to participate or monitors concluded that the student may not have put forth their best effort in completing the assessment.

*Conclusion*

This program of assessment certainly is not a perfect model. However, this program did meet its goal of developing an assessment program that included direct assessment of faculty developed program outcomes whose analysis resulted in actionable information enabling curriculum improvement to take place. As with any project, the failures also highlighted other areas of curriculum needing improvement. Moreover, the project highlighted administrative obstacles that must be overcome before the assessment program is broadened to involve a statistically significant representation of direct student assessment.

Once this initial assessment cycle is complete, it is expected that Blackboard 8.0 will enable the Department to expand these direct assessment tools to additional course sections in order to capture a

greater percentage of students from each course across Worldwide for a more complete picture of Program Outcome measurement. It is clear the University will need to address and dedicate resources to training and mandate assessment activities. At this writing, participation in the assessment program has been on a voluntary basis and incentivized by small stipends to participants. As the assessment program for academic year 2009-2010 begins, some requests for participation by fulltime staff and adjuncts have been an obstacle for a number of reasons: participants are not adequately compensated for the activity, assessment work is not explicitly in the course monitor job description, or some adjuncts fear additional work by the process. The author expects this to be a big hurdle to overcome given current administration-faculty relation.

In preparation for the margining of the Learning Content System and the Outcome System, the author is currently participating in a focus group for Blackboard, Inc. She expects that Blackboard Outcomes will continue to serve as the main assessment tool for the University.<sup>1</sup>

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