



University of Redlands
School of Business
Assessment Guide

School of Business Assessment Guide

This brief guide has been compiled with the input of many of our colleagues in the School of Business and draws on the combined wisdom of individuals, committees, reports and published material from the University of Redlands, as well as from other institutions.

Bing Bai, Director of Undergraduate Programs

Avijit Sarkar, Director of Graduate Programs

November 2016

Table of contents

	Page
What is program-based assessment?	5
What is the purpose of program reviews?	5
Mission statement of the School of Business	6
The University of Redlands Educational Assessment Committee (EAC)	6
At what levels should assessment take place?	7
The benefit of program-based assessment	7
What is assessment used for?	7
What is assessment not used for?	8
Who decides assessment procedures and implements them?	8
University of Redlands assessment process (figure 1)	8
School of Business ACBSP accreditation process (figure 2)	9
ACBSP accreditation	9
What is ACBSP?	9
Why is the School of Business pursuing ACBSP accreditation?	9
How long is the accreditation process?	10
What is the difference between learning goals and learning outcomes?.....	10
Learning goals	10
Learning outcomes	10
Student Learning Outcomes (SLOs)	11
Curriculum maps: BSB and BSM (figure 3)	11
MAM (figure 4)	14
MBA (figure 5)	18
How is the assessment of learning outcomes related to grades?	20
Bloom's Taxonomy	21

Assessment of Student Learning Outcomes (SLOs)	22
Formative versus summative assessment methods	23
Examples of formative assessments	23
Summative assessment	23
Examples of summative assessments	24
Internal versus external assessments	24
Internal	24
External	24
Capsim	24
Comp-XM	24
Peregrine	24
Student learning outcomes assessment data and information gathering (figure 6).	25
What is involved in the assessment cycle?	27
WASC assessment cycle	27
ACBSP assessment cycle	27
Interpreting assessment results	27
 <u>Appendices:</u>	
1. University of Redlands assessment principles	29
2. Nine principles of good practice for assessing student learning	31
3. Sample assessment of learning objectives—BSB	34
4. Bloom’s Taxonomy (2001), with associated verbs	35
5. Sample assessment rubric	36
6. Sample assessment schedule--MBA	37
7. Sample course analysis	38
8. Sample Comp-XM assessment results	41
9. Sample Peregrine assessment data	43
10. Guidelines on interpretation of assessment results	45
Glossary	47

School of Business Assessment Guide

What is program-based assessment?

Educational assessment is a process involving the development and implementation of a system for collecting and analyzing data in order to improve student learning—by which is meant, the knowledge, skills, and competencies that students are expected to acquire and master over time.

It occasions an explicit articulation of what faculty deem to be important for students to learn and to be able to do, given the School of Business's own mission within the context of the broader, University of Redlands liberal arts mission (source: *EAC Program-Based Assessment Tools and Guide*, 2013, p.6).

Although assessment in the School of Business is program based, we conduct assessments after each course because it is one of the ways we can accurately measure whether the course goals or learning objectives are being achieved by our students. Assessment informs us with factual data, which can be used by faculty to improve teaching effectiveness to meet desired student learning objectives (see below) at the course level and the program level.

What is the purpose of program reviews?

The program review process is designed to foster reflection by faculty members about their program's strengths, weaknesses, goals and mission. Program reviews provide a comprehensive analysis of quality based on evidence, supplemented by an external evaluation by qualified reviewers. The results of the program review meaningfully improve teaching effectiveness to inform academic planning, the allocation of resources, and decision-making in both the University of Redlands and the School of Business. Program reviews will:

- Use evidence from multiple sources to develop a comprehensive evaluation of the effectiveness, quality, and sustainability of all programs.
- Improve the educational effectiveness of all programs.
- Obtain external input on programs to help situate them relative to their peers and inform future plans.
- Advance the mission of the University of Redlands and the learning goals of the School of Business.
- Identify collaborative opportunities and minimize duplication.
- Guide long-term planning and resource allocation within the School of Business and the University of Redlands. (Program Review Overview, updated 2012)

Mission Statement of the School of Business:

The Mission Statement of the School of Business has been developed in accordance with the Mission Statement of the University of Redlands, and may be found in the *University of Redlands Catalog, 2016-2018*, p. 311:

The University of Redlands' School of Business enriches our society with graduates who manage well, solve business problems creatively, communicate effectively, learn continually, think globally, and act ethically. We are a community of learners that fosters leadership, opens doors of opportunity, provides high quality teaching, and creates knowledge.

The University of Redlands Educational Assessment Committee (EAC)

In 2013, the University's Educational Assessment Committee (EAC) prepared a report entitled "Program-based Assessment: Tools and Guide." This document forms the foundation for assessment practices throughout the School of Business, from programs down to individual courses. Central to the assessment philosophy described therein are the "University of Redlands Assessment Principles" (see appendix 1). Key elements of this philosophy are notions that:

- a. Assessment is motivated by a commitment to constant improvement in the effectiveness of fostering student learning;
- b. Assessing educational effectiveness is based upon analysis of multiple areas;
- c. The faculty controls the entire process of assessment learning in the school's programs.
- d. Programs are expected to develop and implement assessment plans, the purpose of which is to generate opportunities to improve the quality of the program and increase its educational effectiveness. Within the School of Business, this principle has also been applied at the course level.
- e. To the extent that assessment findings are used in the allocation of resources, priority should be given to improving learning outcomes in programs that have used the assessment process effectively to identify meaningful opportunities to improve student learning.

In addition, it should be noted that the School of Business fully embraces the EAC's principles which are based upon the "Nine Principles of Good Practice for Assessing Student Learning" (see appendix 2) developed by the Assessment Forum of the American Association for Higher Education.

At what levels should assessment take place?

In the School of Business, assessment takes place at the program level in addition to the course level. It is designed to capture in aggregate what students can do rather than focusing on specific students or specific courses or specific faculty members (EAC, 2013, p.6). As stated above, however, assessment is carried out in each and every course.

The benefit of program-based assessment:

Chapter 1 of the 2013 Educational Assessment Committee's report provides the reasoning behind assessment in the School of Business (p.6, ff.):

The greatest benefit of formal and systematic program assessment—that is, assessment that is ongoing and cumulative—is that it can yield reliable evidence about instruction and learning across a department or program. In turn, this evidence-based assessment can give faculty a greater sense of what is occurring in a given program and provide faculty with some direction when considering any necessary revisions to or refinement of the curriculum.

What is assessment used for?

Ongoing assessment of student learning outcomes helps the School of Business understand, and thereby improve, student learning through informed decision-making and planning. More specifically, assessment helps the School of Business:

- Improve services, give feedback, guidance, and mentoring to students in order to help them better plan and implement their educational programs;
- Design and improve programs and courses;
- Plan at the department and program level;
- Identify shared definitions and measurable benchmarks for evaluation of student abilities;
- Understand how groups of students experience the school differently and respond appropriately to the needs of all students;
- Align and coordinate courses within and across disciplines;
- Align and coordinate courses and programs with external institutions' requirements as necessary,
- Continuously reflect, refine and modify teaching and learning practices and
- Improve teaching effectiveness in order to improve student learning outcomes.

What is assessment not used for?

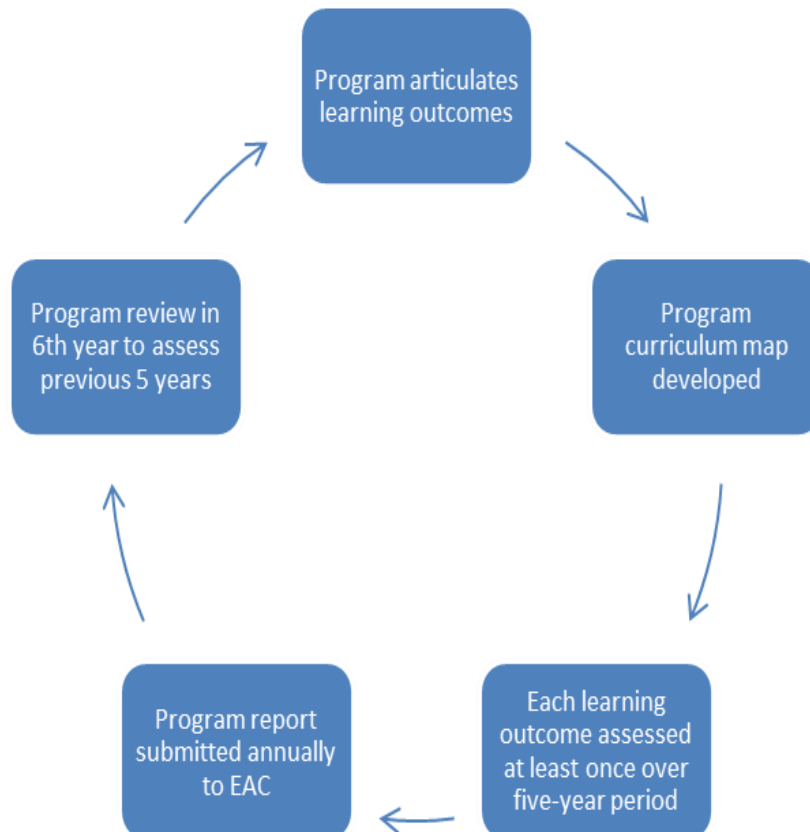
Effective assessment relies upon a climate of trust and freedom of inquiry. The faculty performs assessments of student learning and controls the results of the assessments. Data gathered in support of all learning assessment work is aggregated so as to remove the identity of all students, faculty and/or staff (EAC, 2013, p.8).

Who decides assessment procedures and implements them?

There are some who are concerned that assessment is an external, top-down process that is imposed upon faculty. At the University of Redlands, and in the School of Business, however, faculty members are responsible for assessment and are responsible for establishing learning outcomes as well as for setting benchmark goals, and pursuing future directions (EAC, 2013, p.7).

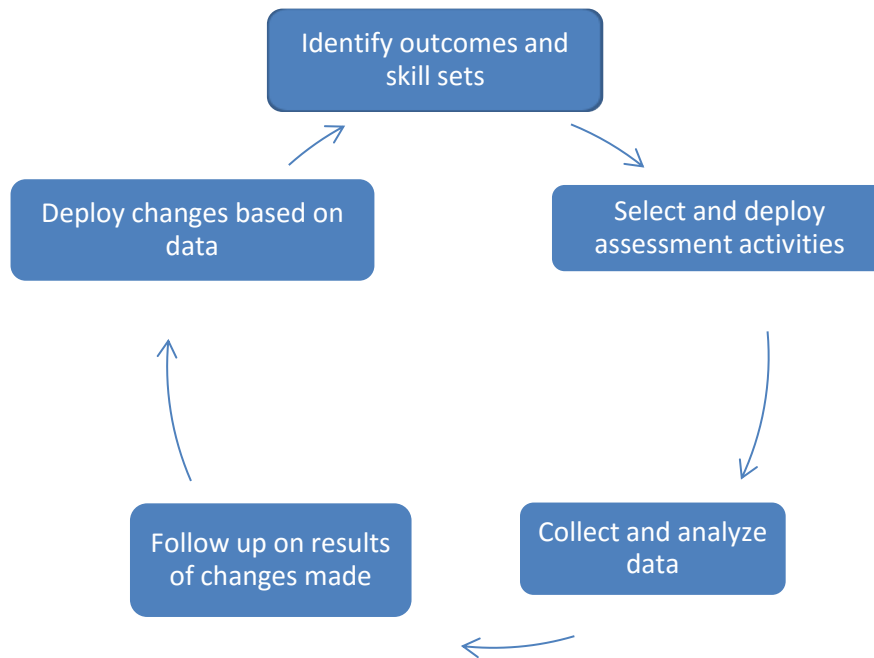
The faculty is not a monolithic structure. The faculty includes full-time and part-time members, as well as the faculty assembly and the curriculum committee. Other stakeholders include the graduate and undergraduate program directors, the dean's leadership committee and the registrar. At the University of Redlands, assessment work takes place at the program and course level. It is designed to capture, in aggregate, student learning outcomes.

Figure 1: University of Redlands Assessment Process



The process described above applies University wide, but for the purposes of ACBSP accreditation, the following model is being implemented in the School of Business:

Figure 2: School of Business ACBSP Accreditation Assessment Process:



From this diagram, it can be seen that assessment is a continuous process of data gathering, analysis, and academic planning which fosters an ongoing cycle of improvement in academic performance.

ACBSP accreditation

What is ACBSP?

The Accreditation Council for Business Schools and Programs (ACBSP) is an accrediting organization encompassing colleges and universities from more than 55 countries and is interested in innovative teaching methods, improving the delivery of business education programs, and creating value for its students.

Why is the School of Business pursuing ACBSP accreditation?

ACBSP accreditation will improve the value of our business education. ACBSP standards are modelled upon the Baldrige National Quality Program. In collaboration with the Baldrige community, ACBSP requires business schools to:

- Foster a culture change of continuous quality improvement in all aspects of the school's operations and mission-related responsibilities.
- Ensure they identify and achieve course learning and program level outcomes in accordance with the School of Business' Mission.

- Differentiates a school's reputation based on excellence and distinction.
- Creates a clear pathway and vision for the future; one that is aligned with the School's Mission and strategic direction in accordance with the University's mission.

How long is the accreditation process?

The ACBSP accreditation process can take 24-36 months, or even longer, as the school prepares a comprehensive preliminary questionnaire, a self-study report documenting compliance with standards, and an on-site visit by ACBSP accreditors. ACBSP accreditation is good for ten (10) years and is subject to Quality Assurance reviews every two (2) years thereafter.

What is the difference between learning goals and learning outcomes?

Successful program assessment begins with a sense of program goals and mission. Much of what a program hopes to accomplish centers on fostering student learning and increasing competencies, knowledge and skills. Successful programs start their assessment work by identifying what they want students to learn, understand (i.e. goals or objective), and be able to do upon successful completion of their studies (i.e. outcomes).

Learning goals are general statements about the aims, values, or purposes of the curriculum and these statements may lend themselves to multiple interpretations. Each of the academic programs in the School of Business has established a set of goals, as, for example, the MBA program (Source: Program-based Assessment Tools and Guide, 2013, p.9):

The MBA program will provide students with a foundation in the core functions of business that integrate theories with practical applications in the fundamental disciplines of business and management, enhanced through a firm grounding in the University of Redlands' rich liberal arts tradition that strengthens the ability to think critically, communicate effectively, and work in teams.

Learning goals are often too general to be measurable and are holistic or generic in nature, as the following MBA program goals demonstrate:

- MBA graduates will be able to communicate effectively.
- MBA graduates will be able to think critically.
- MBA students will be able to work in teams.

Learning outcomes, on the other hand, articulate what a student does that demonstrates progress toward these goals. Students should be able to reliably use this skill or competence upon completion of the program of study. Thus, learning outcomes define how students meet the program's learning goals when they have completed the curriculum.

Measurable Student Learning Outcomes (SLOs) tend to be far more specific in nature. An example of the learning outcome from the “communicate effectively” goal for a marketing emphasis follows:

- Marketing graduates will be able to analyze and evaluate a company’s products versus competitors’ products in a specific market segment and design effective advertising messages and promotional channels to increase the sales of the company’s products

Student Learning Outcomes (SLOs)

Student learning outcomes are ordered by level. Working with WASC recommendations, the School of Business faculty has differentiated three categories of mastery:

Introduced: The minimum competencies, skill, or knowledge that students need to acquire and practice before they move on to other levels of study and of achievement within a program or discipline or interdisciplinary area.

Developed: Higher order or more complex levels of competencies than at the introductory level of competency and that students demonstrate with varying degrees of progress.

Mastered: The most advanced level of accomplishment for graduates in a given disciplinary or interdisciplinary program. Such a level of accomplishment is usually manifested near the end of a program of study.

Each course in a program is entered into a **curriculum map** to provide to provide an overview of learning outcomes (see below).

Figure 3: **Curriculum Map: BSB and BSM**

25-Mar-13

If the course requires students to produce an artifact demonstrating student learning relevant to the outcome, indicate by placing the appropriate letter in the box (I = Introduced; D = Developed; M = Mastered).

	BAMG 232	BAMG 334	BAMG 356	BAMG 365	BAMG 401	BAMG 430	BAMG 485 Capstone	BUSB 145	BUSB 230	BUSB 232	BUSB 260	BUSB 300	BUSB 301	BUSB 330	BUSB 333	BUSB 340	BUSB 342	BUSB 361	BUSB 433	BUSB 481	BUSB 370	BUSB 485 Capstone
BSM (BAM)																						

Explain fundamental management theories and concepts.		I	D		D		M		I		I	I	D		I	D		I				
Identify global factors impacting management decisions.		I	D				D				I		D		I	M		D				
Evaluate ethical implications of their decisions.		I	D		D		M				M		D		I	I		D				
Address complex social, managerial and leadership issues using effective oral and written communication.	I	D	M		D		M				D	I/D		M		D	M		D			
Identify, analyze and solve management problems using critical evaluation skills.	I/D	D	M				M	I	I			D	I/D		M		D	D	D			
BSB																						
Explain fundamental business theories and concepts.									I	I		D	I	D	I	I	D	I/D	D	I	D	D
Identify global and spatial factors impacting business decisions.												I		D	I	I	M	I	M	D	I	D

Evaluate ethical implications of their decisions.												M		D	I	I	I	I	I	D		D
Address complex social, managerial and leadership issues using effective oral and written communication.												D	D	M	D	D	M	I	I	D	I/D	D
Identify, analyze and solve business problems using critical evaluation skills.												D	D	M	D	D	D	D	D	D	D	D
	Avijit	Kimberly	Bing	Pete	Denise	James Spee	Castro	Julia Brandesi	Julia Brandes	Julia Brandes	Pete	Carlo Carrascoso	Allison/Denise	Bing	Kimberly	Xin	Johannes	Charng-Yi/Satish	Jim Pick	Kamala	Avijit	Castro

Figure 4: Curriculum Map: MAM

Revised Curriculum Map University of Redlands School of Business MA in Management February 1, 2015

If the course requires students to produce an artifact demonstrating student learning relevant to the outcome, indicate by placing the appropriate letter in the box according to the SOLO Levels:

P	Pre-structural	Students are simply acquiring bits of unconnected information, which have no organization and make no sense. The student will show a lack of understanding.
U	Uni-structural,	Define, identify, name, draw, find, label, match, follow a simple procedure
M	Multi-structural,	Describe, list, outline, complete, continue, combine
R	Relational	Sequence, classify, compare & contrast, explain (cause & effect), analyze, form an analogy, organize, distinguish, question, relate, apply
E	Extended abstract	Generalize, predict, evaluate, reflect, hypothesize, theories, create, prove, justify, argue, compose, priorities, design, construct, perform

Biggs and Tang (2007)

REQUIRED COURSES

Please Note: MGMT610 to MGMT690 are taken in the same sequence by every student. The schedule for the remaining courses depends on the entry point.

COURSES:	MGMT631 Management and Organizational Behavior	MGMT 667 Business, Ethics, and Society	MGMT 610 Contexts for Contemporary Management	MGMT 661 Introduction to Analytics and Decision Making	MGMT 674 Human Resources Management	MGMT 604 Developing Management Skills	MGMT 686 Organizational Theory	MGMT 690 Strategy	MGMT 695 Management Consulting Capstone
Syllabus Author	Spee/Gollakota	Smith	MacNeil	Sarkar	Bai	Spee	Gollakota	Spee and Gollakota	Spee
Credits	4	4	4	4	4	4	4	4	4
Entry 1 Sequence	1 (Same as 36 unit MBA)	2 (Same as 36 unit MBA)	Aligns with MBA Analytics Course	Aligns with MBA IT course	Aligns with MBA Emphasis Course	Aligns with MBA Emphasis Course	Aligns with MBA Emphasis Course	Aligns with MBA Emphasis Course	Aligns with MBA Capstone Course
Entry 2 Sequence	8 (Same as 36 unit MBA)	1 (Same as 36 unit MBA)	Aligns with MBA Analytics Course	Aligns with MBA IT course	Aligns with MBA Emphasis Course	Aligns with MBA Emphasis Course	Aligns with MBA Emphasis Course	Aligns with MBA Emphasis Course	Aligns with MBA Capstone Course
Entry 3 Sequence	7 (Same as 36 unit MBA)	9 (Same as 36 unit MBA)	Aligns with MBA Analytics Course	Aligns with MBA IT course	Aligns with MBA Emphasis Course	Aligns with MBA Emphasis Course	Aligns with MBA Emphasis Course	Aligns with MBA Emphasis Course	Aligns with MBA Capstone Course
LEARNING OUTCOMES									
Personal Skills. MA in Management graduates:									
Set their own goals for improvement in their Self-Awareness (knowing one's internal states, preferences, resources, and intuitions) and assess progress toward those goals.	U		M			M			
Set their own goals for improvement in their Self-Management skills (Managing ones' internal states, impulses, and resources) and	U		M			M			R

Management graduates:									
Graduates of the MA in Management program can:									
Recognize and solve ethical problems;	U	R	R		M				R
Identify and synthesize critical features of an issue or set of issues and write a well-defined, specific, and insightful statement that incorporates evidence in a reasonable and persuasive manner;	M	R	R	U	M	M	R	R	R
Making oral effective presentations.	R	R	R	U	M	R	R	R	R
Career Specific Skills.									
Depending on their career goals, MA in Management graduates will engage in self-directed learning in order to improve competencies that they choose related to their own career goals.	M	M	R	M	M	R	M	R	E

Figure 5: Curriculum Map: MBA

Sequence	Required or Emphasis	Course	Master Syllabus Author	Graduates of the MBA program demonstrate application of functional business knowledge by the use of critical thinking skills to solve business problems within disciplines such as finance, marketing, management, operations management, and global business at the developmental level.*	MBA graduates can communicate effectively, work in teams, and take a leadership role if appropriate through collaboration in teams.*	MBA graduates can use ethical reasoning to determine how a proposed solution may affect your company and the wider community.*	Graduates of the MBA program understand multiple perspectives of a business issue. Skillfully analysis business problems from different perspectives including functional departments, business units, industry, national, and global economy.*	MBA graduates integrate concepts across disciplines to make effective business decisions.
1	Required	BUAD 658 Accounting and Finance for Managers (4)	MacQueen	I/D	I/D	I/D	I/D	I
2	Required	BUAD 642 International Business and Marketing (4)	Zhao	I/D	I/D	I/D	I/D	I
3	Required	BUAD 644 Business Statistics and Economics (4)	Brandes	I/D	I/D	I/D	I/D	
4	Required	MGMT 667 Business, Ethics and Society (4)	Smith	I	D	D/M	I/D	D/M
5	Required	MGMT 631 Management and	Gollakota	D	D	I/D	I/D	

Organizational Behavior (4)

6	Required	BUAD 683 Information and Knowledge Management (4)	Pick	D	D	I/D	I/D	
7	Marketing Emphasis & Non-emphasis Required	MGMT680W Marketing Management (4)	Perry; Zhao	D	D	D	I/D	M
7	Finance Emphasis	FIN 661W Financial Markets and Institutions (4)	Thosar	D	D	D	D	
7	GIS Emphasis	GISB691W GIS for Marketing (4)	Perry	I/D	D	D	D	D
7	Global Emphasis & Non-emphasis Required	INTB 655W Global Environment for Business (4)	Groshek	D/M	D/M	D	D	D/M
8	Finance Emphasis & Non-emphasis Required	BUAD 660 Managerial Finance (4)	Thosar	D/M	D	D	I/D	
8	Global Emphasis & Marketing Emphasis	INTB 694 Global Marketing (4)	Zhao; Groshek	D	D/M	D	D	M
8	GIS Emphasis	GIS692W Geographic Analysis of Global Business (4)	Pick	D	D	D	D	D
9	Required	MGMT 651 Analytics for Managerial Decision-Making (4)	Azari; Sarkar	D	D	D/M	I/D	D
10	Marketing Emphasis	MGMT 683W Marketing Analytics	Zhao	D	D	D	I/D	
10	Global Emphasis	INTB 693W Global Finance	Groshek	D/M	D/M	D/M	I/D	M

& Finance Emphasis								
10	GIS Emphasis	GIS694W Contemporary Planning of Business GIS	Pick	D	D	D	I/D	D
11	GIS Emphasis	GISB693W GIS and Strategy	Pick	M	M	M	D/M	M
11	Non-emphasis Required	MGMT674 Human Resources Management	Bai	D	D	D/M	D	M
11	Marketing Emphasis	MGMT 694W Marketing Strategy	Zhao	M	D/M	D/M	D/M	M
11	Finance Emphasis	FIN662W Investment Theory and Analysis	Fallatoon	D	D	D/M	I/D	M
12	Required	BUAD 696 Interdisciplinary Integrating Capstone OR INTB 695 Global Business Consultancy Capstone OR BUAD 695 Business Consultancy Capstone OR MGMT 695 Management Consulting Capstone	Chen; MacQueen; Spee	M	M	M	M	M

How is the assessment of learning outcomes related to grades?

There is often confusion over the difference between grades and learning assessment, with some believing that they are totally unrelated and others thinking they are one and the same. The following information clarifies these terms. Grades are often based on more than learning outcomes. Instructors' grading criteria often include behaviors or activities that are not measures of learning outcomes, such as attendance, participation, improvement, or effort. Although these may be correlated with learning outcomes, and can be valued aspects of the course, typically they are not measures of learning outcomes themselves. Grading is formative.

Assessment of learning can and should rely on or relate to grades, however, and so far as they do, grades can be a major source of data for assessment. To use grades as the basis for learning outcomes, grades would first have to be decomposed into the components that

are indicators of learning outcomes and those that are indicators of other behaviors. Assessment is summative.

Second, grades would have to be based on clearly articulated criteria that are consistently applied. Third, separate grades or sub scores would have to be computed for the major components of knowledge and skills so that evidence of students' specific areas of strength and weakness could be identified. For example, although 30% of a class may receive a grade of B, the group may all have shown a very high level of competence on one skill set but only moderate achievement in another. This kind of strength and weakness assessment provides feedback that is useful to students because it can guide and focus their practice, to the instructor, because it can reveal topics and skills that require further instructional activities, and to the department, because it can guide potential changes in curriculum to appropriately address areas of strength and weakness. (Source: *Carnegie Mellon: Why's and How's of Assessment.*)

Bloom's Taxonomy:

Both program outcomes and student learning outcomes are statements of what graduates are expected to be able to do, so each contains an action verb or gerund.

The School of Business uses Bloom's Taxonomy in the generation of clear and concise statements that identify the specific knowledge, abilities, values, attitudes and skill-sets that students will possess or have mastered. Originally developed in 1956 by Benjamin Bloom with collaborators Max Englehart, Edward Furst, Walter Hill and David Krathwohl, the Taxonomy of Objectives established a framework for categorizing educational goals. The taxonomy was revised by a group of cognitive psychologists, curriculum theorists and instructional researchers, and testing and assessment specialist and reissued in 2001 as *A Taxonomy for Teaching, Learning, and Assessment* (see below).



The School of Business uses the revised version because it suggests a more dynamic view of classification that encompasses the cognitive processes with which students will engage as they address knowledge. Starting from the basis of knowledge/remembering, Student Learning Outcomes (SLOs) are measured in terms of understanding, applying, analyzing, evaluating and creating. (For a chart of action words by category, see appendix 4.)

As stated, successful, measurable SLOs contain an action verb or gerund, a statement specifying the learning that is to be demonstrated and a criterion or standard for the specific context of performance and/or competency. For example, “students will apply the process for recognizing ethical dilemmas in business.” Further examples might include:

1. Apply written communication skills to produce in-depth written analyses of course readings and/or cases;
2. Recommend operational strategies to increase productivity and competitiveness for service and manufacturing businesses;
3. Calculate and interpret commonly used accounting ratios to evaluate primary and secondary sources of information.

Assessment of Student Learning Outcomes (SLOs)

- In assessing SLOs, the specific SLO is identified as well as a list of relevant/important knowledge, abilities, values/attitudes, and skill sets that students will possess, master, apply, etc. to demonstrate achievement of that SLO.
- Faculty members select and deploy assessment activities, such as case studies, exams, research projects, term paper, simulations where students’ performance can be evaluated. Papers, projects, presentations, and assessments are designed to assure the inclusion of:
 - a. An assessment rubric that evaluates the “level or degree of proficiency” for each part and competency of the skill set. (see appendix 5)
 - b. Provides guidelines to measure the level or degree of competency of the specific knowledge, ability, value/attitude, or skill-set.
 - c. Assigns a range of scores for each degree or level of competency of the specific knowledge, ability, value/attitude, or skill set. For example: score 0 for “Not possessing”; 1-3 for “Initial/Beginning”; 4-6 for “Emerging/Developing”; 7-9 for “Developed/Accomplished”; 10 for “Highly Developed/Excellent.”
 - d. Report each student’s success by a specific score for each specific knowledge, ability, value/attitude, or skill-set that reflects the student’s level or degree of competency.
- Assessment results (“closing the loop”):
 - a. Faculty members analyze the results and aggregate the scores of all the courses taught per term.
 - b. Based upon the foregoing analysis, faculty members develop an action plan to improve academic performance.
 - c. Faculty members implement the plan for improvement.

A sample schedule of assessment may be found at appendix 6 and a sample course analysis may be found at appendix 7.

Formative versus summative assessment methods

Formative assessment provides feedback and information during the instructional process, while learning is taking place. It may consist of the following, both at the graduate and undergraduate levels:

Examples of formative assessments:

- Internally standardized School of Business tests
- Quizzes and exams
- Online discussions
- Essays (including drafting and revision)
- Case study analyses
- Problem sets
- Oral presentations
- Group projects

In addition, the undergraduate programs include a math placement test upon entry into the program.

The purpose of this testing is to identify areas that may need improvement during the instructional process. It provides instructors with the information they need to adjust teaching and learning as they occur, and it also provides program directors with data related to trends, best practices and problem areas requiring their attention.

Summative assessment, on the other hand, is carried out after the learning has been completed and it provides instructors and program directors with information that sums up the teaching and learning process

Examples of summative assessments:

- End of course term research & analytical essays
- Course final examinations
- Course final oral presentations
- Capstone projects including simulations consultancies and multi-functional analysis projects; analysis of capstones by rubric linked to program objectives

Typically, summative assessment is given to the students in the form of a quiz, exam, term paper or presentation at the end of a set point to assess what they have learned, and how well. The set point could be at the mid-point of the course, or after a skill-set has been learned. Also, a summative assessment may be made in order to ascertain whether the students have attained an acceptable level of knowledge and skill and whether they are able to effectively apply program learning objectives. A further use for this type of

assessment is to yield data that will permit an assessment of the effectiveness of the program and its curriculum.

Internal versus external assessments:

The designations internal and external assessments refer to the point of origin of the assessment. Simply, if the assessment originated in the School of Business, it is an internal assessment, and conversely, if the assessment is performed by entities not internal to the School of Business they are categorized as external assessments. Examples include:

Internal:

Assessments developed by School of Business faculty to assess programs or courses.

External:

- Assessment developed by companies or external reviewers designed to assess programs or courses;
- Capsim, Comp-XM;
- Peregrine.

Undergraduate and graduate programs and MBA emphases use capstone courses.

Capsim is a team simulation that is used exclusively in the MBA program.

Comp-XM provides external evaluation of the students' knowledge skill sets used in the simulation environment and is only used in the MBA program. Other programs use internal assessments to achieve a similar outcome. A sample set of Comp-XM assessment results may be found at appendix 8.

Peregrine provides nationally normed, summative assessment exams for both internal and external academic program evaluation and benchmarking. The online exam assesses retained student knowledge related to the degree program's learning outcomes. The online exam service is designed to satisfy the ACBSP accreditation requirements related to learning outcomes assessment, quality assurance, and external academic benchmarking. This exam also allows school officials to assess the quality of our academic programs and to provide the best possible educational experience for all students. A sample set of Peregrine results may be found at appendix 9.

Figure 6: Student Learning Outcomes Assessment Data and Information Gathering

Degree Program	Internal & External Data	Formative & Summative Date
MBA (all emphases)	<p>Internal:</p> <ul style="list-style-type: none"> • Capstone projects including consultancy projects, simulation projects, and multi-functional analysis projects; • Analysis of capstones by rubric linked to program objectives <p>External:</p> <ul style="list-style-type: none"> • On-going program review with external reviewers/reports • Capstone: domestic and international consultancy client feedback • Capsim, Comp-XM • Peregrine 	<p>Formative:</p> <ul style="list-style-type: none"> • Internally standardized School of Business tests • Quizzes • Online discussions • Essays (including drafting and revision) • Case study analyses • Problem sets • Oral presentations • Group projects <p>Summative:</p> <ul style="list-style-type: none"> • End of course term research & analytical essays • Course final examinations • Course final oral presentations • Capstone projects including simulations consultancies and multi-functional analysis projects; analysis of capstones by rubric linked to program objectives
MA in Management	<ul style="list-style-type: none"> • Internal: • Capstone projects including consultancy projects, simulation projects, and multi-functional analysis projects • Analysis of capstones by rubric linked to program objectives <p>External:</p> <ul style="list-style-type: none"> • On-going program review with external reviewers/reports • Capstone: domestic and international consultancy client feedback • Peregrine 	<p>Formative:</p> <ul style="list-style-type: none"> • Internally standardized School of Business tests • Quizzes • Online discussions • Essays (including drafting and revision) • Case study analyses • Problem sets • Oral presentations • Group projects <p>Summative:</p> <ul style="list-style-type: none"> • End of course term research & analytical essays • Course final examinations • Course final oral presentations • Capstone projects including simulations, consultancies and multi-functional analysis projects; analysis of cap stones by rubric linked to program objectives

<p>BS in Business</p>	<p>Internal:</p> <ul style="list-style-type: none"> • Capstone projects including consultancy projects, simulation projects, and multi-functional analysis projects • Entry math placement test • Analysis of capstones by rubric linked to program objectives <p>External:</p> <ul style="list-style-type: none"> • On-going program review with external reviewers/reports • Capstone: domestic and international consultancy client feedback • Peregrine 	<p>Formative:</p> <ul style="list-style-type: none"> • Entry math placement test • Assessed tests • Quizzes • Online discussions • Essays (including drafts and revisions) • Case study analyses • Problem sets • Oral presentations • Group projects <p>Summative:</p> <ul style="list-style-type: none"> • End of course term research & analytical essays • Course final examinations • Course final oral presentations • Capstone projects including simulations, consultancies and multi-functional analysis projects; analysis of capstones by rubric linked to program objectives
<p>BS in Management</p>	<p>Internal:</p> <ul style="list-style-type: none"> • On-going program review with external reviewers/reports <p>External:</p> <ul style="list-style-type: none"> • On-going program review with external reviewers/reports • Capstone: domestic and international consultancy client feedback • Peregrine 	<p>Formative:</p> <ul style="list-style-type: none"> • Entry math placement test • Assessed tests • Quizzes • Online discussions • Essays (including drafts and revisions) • Case study analyses • Problem sets • Oral presentations • Group projects <p>Summative:</p> <ul style="list-style-type: none"> • End of course term research & analytical essays • Course final examinations • Course final oral presentations • Capstone projects including simulations, consultancies and multi-functional analysis projects; analysis of capstones by rubric linked to program objectives

What is involved in the assessment cycle?

All programs within the School of Business (and the entire University of Redlands) are required to articulate learning outcomes expected for graduates of their programs.

WASC assessment cycle:

A curriculum map (see Figure 3) indicates how students are introduced to these outcomes, how they develop their proficiencies for the outcomes, and where they demonstrate mastery for each outcome. Programs assess all learning outcomes at least once over a five-year cycle, using direct evidence of student learning. Each year the program must submit a report to the University of Redlands Educational Assessment Committee (comprised of faculty members from across the College of Arts and Sciences, the School of Education, and the School of Business) detailing what was assessed, what evidence was used, how the evidence was evaluated, and what the program learned about student success.

In academic year (AY 2015-2016), the School of Business is assessing criteria 2 and 5. Every sixth year, each program must reflect upon the previous five years of assessment as part of the required six-year program review.

ACBSP assessment cycle:

For purposes of ACBSP accreditation, faculty are reviewing all programs over 2-3 years and are basing their analysis on three data points in order to establish trends. Review will continue as an ongoing process. A support team is compiling and aggregating the data collected. All of the data collected are stored in Moodle. Outcomes are reviewed and analyzed by program directors. Recommended changes and improvements are being undertaken on an ongoing basis. A graphical representation of this process may be found in figure 1 (p.8) of this document.

Interpreting Assessment Results:

Interpretation of program-wide assessments goes beyond the evidence provided by SLOs. Faculty members are encouraged to use the data and analysis as way to uncover implications and develop suggestions for improving the assessment process itself. Unless there is an appropriate and self-critical assessment process, assessment results can be contaminated or ineffective in showing SLOs or identifying areas that need improvement. Thus, there is a need to avoid citing or commenting upon the data from a current round of assessment simply based on their face value, which could lead to biased or flawed interpretation. There is a need for an ongoing review of the components of the assessment process itself in order to obtain reliable and useful data in the future. The Graduate

Programs Director has developed and disseminated to faculty colleagues “Guidelines on Interpretation of Assessment Results” (see appendix 10).

Appendices

Appendix 1: University of Redlands Assessment Principles

1. Assessment work at the University of Redlands is motivated by a commitment to improve the institution's effectiveness in fostering student learning within the framework of our liberal arts mission.
2. Educational effectiveness results from multiple factors, such as the quality of courses, the coherence of academic programs, the integration of student life programs with student learning, the motivation, capacities and preparation of learners, and the adequacy of administrative support for learning. Assessment findings will be used to improve student learning in all of these areas.
3. Faculty (tenure track and term contract) shall control the entire process of student learning in their own programs. The Educational Assessment Committee, in coordination with Academic Affairs, will set the general parameters and timetable for assessment.
4. Faculty control the assessment process, analyze the data and offer recommendations for changes to curriculum and student learning outcomes.
5. Assessment findings shall not be used to evaluate individual faculty in the review process.
6. All programs are expected to develop and implement assessment plans. The purpose of program level assessment is to generate opportunities to improve the quality of the program and increase its educational effectiveness. Assessment data are not used to be used to rank programs or compare their quality; rather the function of assessment is improvement of educational effectiveness.
7. To the extent assessment findings are used in the allocation of resources, priority should be given to improving learning outcomes in programs that have used the assessment process effectively to identify meaningful opportunities to improve student learning.
8. Programs must assess student learning through direct methods, however, because the learning outcomes and assessment approaches vary across disciplines, the methods used to directly assess student learning and the data collected need not be standardized across programs and school.
9. Programs must follow the guidelines and criteria promulgated by the Assessment Committee when they report their data and assessment findings.
10. The university administration will provide resources to make assessment activities manageable within faculty workload expectations.

11. Programs should look for productive opportunities to involve students in assessment design.

Approved by the Faculty Assembly and endorsed by the Vice-President for Academic Affairs in 2009.

Appendix 2: Nine Principles of Good Practice for Assessing Student Learning.

Source: American Association for Higher Education ASSESSMENT FORUM

1. The Assessment of student learning begins with educational values.

Assessment is not an end in itself but a vehicle for educational improvement. Its effectiveness practice, then, begins with and enacts a vision of the kinds of learning we most value for students and strive to help them achieve. Educational values should drive not only what we choose to assess but also how we do so. Where questions about educational mission and values are skipped over, assessment threatens to be an exercise in measuring what's easy, rather than a process of improving what we really care about.

2. Assessment is most effective when it reflects an understanding of learning as multi-dimensional, integrated, and revealed in performance over time.

Learning is a complex process. It entails not only what students know but what they can do with what they know; it involves not only knowledge and abilities but values, attitudes, and habits of mind that affect both academic success and performance beyond the classroom. Assessment should reflect these understandings by employing a diverse array of methods, including those that call for actual performance, using them over time so as to reveal change, growth, and increasing degrees of integration. Such an approach aims for a more complete and accurate picture of learning, and therefore firmer bases for improving students' educational experience.

3. Assessment works best when the programs it seeks to improve have clear, explicitly stated purpose.

Assessment is a goal-oriented process. It entails comparing educational performance with educational purposes and expectations—those derived from the institution's mission, from faculty intentions in program and course design, and from knowledge of students' own goals. Where programs purposes lack specificity or agreement, assessment as a process pushes a campus toward clarity about where to aim and what standards to apply; assessment also prompts attention to where and how program goals will be taught and learned. Clear, shared, implementable goals are the cornerstone for assessment that is focused and useful.

4. Assessment requires attention to outcomes but also, and equally, to the experiences that lead to those outcomes.

Information about outcomes is of high importance; where students "end up" matters greatly. But to improve outcomes, we need to know about student experience along the way—about the curricula, teaching, and kind of student effort that lead to particular outcomes.

Assessment can help us understand which students learn best under what conditions; with such knowledge comes the capacity to improve the whole of their learning.

5. Assessment works best when it is ongoing not episodic.

Assessment is a process whose power is cumulative. Though isolated, “one-shot” assessment can be better than none; improvement is best fostered when assessment entails a linked series of activities undertaken over time. This may mean tracking the process of individual students, or of cohorts of students; it may mean collecting the same examples of student performance or using the same instrument semester after semester. The point is to monitor progress toward intended goals in a spirit of continuous improvement. Along the way, the assessment process itself should be evaluated and refined in light of emerging insights.

6. Assessment fosters wider improvement when representative from across the educational community are involved.

Student learning is a campus-wide responsibility, and assessment is a way of enacting that responsibility. Thus while assessment efforts may start small, the aim over time is to involve people from across the educational community. Faculty play an especially important role, but assessment’s questions can’t be fully addressed without participation by student-affairs educators, librarians, administrators, and students. Assessment may also involve individuals from beyond the campus (alumni/ae, trustees, employers) whose experience can enrich the sense of appropriate aims and standards for learning. Thus understood, assessment is not a task for small group of experts but a collaborative activity; its aim is wider, better-informed attention to student learning by all parties with a stake in its improvement.

7. Assessment makes a difference when it begins with issues of use and illuminates question that people really care about.

Assessment recognizes the value of information in the process of improvement. But to be useful, information must be connected to issues or questions that people really care about. This implies assessment approaches that produce evidence that relevant parties will find credible, suggestive, and applicable to decisions that need to be made. It means thinking in advance about how the information will be used, and by whom. The point of assessment is not to gather information and return the “results”; it is a process that starts with the questions of decision-makers, that involved them in the gathering and interpreting of data, and that informs and helps guide continuous improvement.

8. Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change.

Assessment alone changes little. Its greatest contribution comes on campuses where the quality of teaching and learning is visibly valued and worked at. On such campuses, the push to improve educational performance is a visible and primary goal of leadership; improving the quality of undergraduate education is central to the institution's planning, budget, and personnel decisions. On such campuses, information about learning outcomes is seen as an integral part of decision-making, and avidly sought.

9. Through assessment, educators meet responsibilities to students and the public.

There is a compelling public stake in education. As educators, we have a responsibility to the public that support or depend on us to provide information about the ways in which our students meet goals and expectations. But what responsibility goes beyond the reporting of such information; our deeper obligation—to ourselves, our students, and society—is to improve. Those to whom educators are accountable have a corresponding obligation to support such attempts at improvement.

Appendix 3: Sample assessment of learning objectives--BSB

Courses	Program Learning Objective #	Courses	Program Learning Objective #
BUSB 230 Economics for Business	5	BUSB 340 Principles of Marketing	1 & 4
BAMG 232 Data Analysis and Decision Making for Managers	4 & 5	BUSB 342 International Business	2
BAMG 365 Accounting and Finance for Managers	1	BAMG 356 Human Resources Management	1, 4, & 5
BUSB 300 Ethical and Legal Environment of Business	3 & 5	BAMG 401 Critical Perspectives on Management	4 & 5
BUSB 301 Critical Analysis: Written and Oral Communication	4 & 5	BAMG 430 Advanced Topics in OB and Management	1, 4, & 5
BUSB 330 Managing and Leading Organizations	1, 4, & 5	BUSB 481 Strategic Management	1
BAMG 334 Understanding Informational Contexts	4 & 5	BAMG 485 Management Capstone	1, 2, 3, 4, & 5

Source: Bing Bai presentation at Faculty Conference, April 2016

Appendix 4: Bloom's Taxonomy, with associated verbs (2001 revision)

Remember (recall facts & basic concepts)	Understand (explain ideas or concepts)	Apply (Use information in new situations)	Analyze (Draw connections among ideas)	Evaluate (Justify a stand or decision)	Create (Produce new or original work)
Define	Classify	Execute	Differentiate	Appraise	Design
Duplicate	Describe	Implement	Organize	Argue	Assemble
Discuss	Discuss	Solve	Relate	Defend	Conjecture
List	Explain	Use	Compare	Judge	Develop
Memorize	Identify	Demonstrate	Distinguish	Support	Formulate
Repeat	Recognize	Interpret	Question	Value	Author
State	Report	Operate	Examine	Critique	Investigate

Appendix 5: Sample assessment rubric

Sample Rubric

Categories	Does Not Meet Expectations (Poor: 0-2 pts)	Minimally Meets Expectations (Needs Improvement: 3-5 pts)	Meets Expectations (Good: 6-8 pts)	Exceeds Expectations (Excellent: 9-10 pts)
1. Knowledge of the issue/problem	Demonstrates a limited ability in identifying a problem statement or related contextual factors.	Demonstrates the ability to construct a problem statement with evidence of most relevant contextual factors, but problem statement is superficial.	Demonstrates the ability to construct a problem statement with evidence of most relevant contextual factors, and problem statement is adequately detailed.	Demonstrates the ability to construct a clear and insightful problem statement with evidence of all relevant contextual factors.
2. Comprehension & Analysis	Lists evidence, but it is not organized and/or is unrelated to the problem.	Organizes evidence, but the organization is not effective in revealing the causes of the problem.	Organizes evidence, and the organization is effective in revealing the causes of the problem.	Organizes and synthesizes evidence to reveal insightful causes to the problem.
3. Application of the knowledge & Propose solutions	Proposes a solution that is difficult to evaluate because it is vague or only indirectly addresses the problem statement.	Proposes one solution that is “off the shelf” rather than individually designed to address the specific contextual factors of the problem.	Proposes one or more solutions, which are sensitive to contextual factors, to indicate comprehension of the problem.	Proposes one or more solutions, which are sensitive to contextual factors, to indicate a deep comprehension of the problem.
4. Evaluate potential solutions	Evaluation of solutions is superficial (e.g., contains surface level explanation) and includes at least one of the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.	Evaluation of solutions is brief (e.g., explanation lacks depth) and includes at least two of the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.	Evaluation of solutions is adequate (e.g., contains thorough explanation) and includes at least three of the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.	Evaluation of solutions is deep and elegant (e.g., contains thorough and insightful explanation) and includes, deeply and thoroughly, all of the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.

Source: Bing Bai presentation at Faculty Conference, April 2016

Appendix 6: Sample Assessment Schedule

Course	Focused areas of SLO assessment	#s of sections (Nov-Dec)	#s of sections (Jan-Feb)	#s of sections (Mar-Apr)	#s of sections (May-Jun)	#s of sections (Jul-Aug)
BUAD641 Managerial Economics	-Apply functional knowledge to solve business problems. -Analyze business problems from different perspectives.	10	0	0	0	0
BUAD 642 Int'l Business & Marketing	-Apply communication skills to solve business problems. -Analyze business problems from different perspective.	9	0	0	8	0
BUAD680 Marketing Management	-Apply functional knowledge to solve business problems. -Apply communication skills to solve business problems.	1	0	3	1	0
BUAD 659 Accounting for Managers (or BUAD 658 Acct & Fin for Managers	-Apply functional knowledge to solve business problems.	14	2	8	9	1
MGMT 650 Mgmt Science & Decision Analysis (or MGMT651 Analytics for Managerial Decision Making	-Apply functional knowledge to solve business problems. -Analyze business problems from different perspectives.	10	0	1	15	0
BUAD644 Business Stat & Econ	-Apply stat and econ concepts, knowledge, & tools to analyze and solve business problems.	1	9	0	0	(multiple sections)
MGMT Business, Ethics & Society (MBA & MAM)	-Identify & address ethical issues in business decision making. -Analyze business problems from ethics & society perspectives. -Evaluate ethical implications when recommending solutions for business problems.	14	0	14	10	1
MGMT631 Mgmt & Org Theory (or MGMT631 Mgmt & Org Behavior (MBA & MAM)	-Apply leadership & teamwork skills in business administration -Apply written & oral communication skills to make convincing recommendations in a reasonable & persuasive manner. -Apply management knowledge to assess management issues.	6	1	9	18	0
Capstone courses with Comp-XM & Peregrine exams	-Apply functional knowledge to solve business problems. -Apply leadership & teamwork skills in business administration -Analyze business problems from different perspectives.	0	8	0	0	19

Appendix 7: Sample Course Analysis--MBA

Master of Business Administration

(ACBSP Self-Study Year 2015-16)

Performance Indicator		Program Description																							
<p><u>BUAD 644 Business Statistics and Economics</u></p> <p>Performance Indicator 1 - Apply statistical inference techniques to business situations. Relate macroeconomic and microeconomic concepts to the environment of business. SLO # 2,3,4 & 5.</p> <p><u>MBA Program Learning Objective #1 and 4</u></p> <p>1. Apply functional knowledge to solve business problems.</p> <p>4. Skillfully analyze business problems from different perspectives.</p>		<p>The Master of Business Administration (MBA) provides a foundation in the core functions of business and the development of leadership and integrity, enhanced through a firm grounding in the University of Redlands’ rich liberal arts tradition. Successful leaders need attributes drawn from a liberal education, especially the ability to think critically, communicate effectively, and work in teams. The MBA provides an academic balance through a combination of conceptual knowledge, critical thinking, and practical application in the fundamental disciplines of business and management.</p> <p>Program Learning Objectives and Student Learning Outcomes are assessed as follows:</p> <ul style="list-style-type: none"> • Direct – Assessing student performance by administering Final Exam. • Formative- Assessment is conducted during the students’ enrollment in an eight week course with a Final Exam being administered in the last class session. • Internal- SLO is derived from the MBA Program Outcomes and delineated in the course syllabus. 																							
Analysis of Results																									
Performance Measure Measureable Goal What is your goal?	What is your measurement Instrument or process? (indicate length of cycle)	Current Results What are your current results?	Analysis of results What did you learn from the results	Action Taken or Improvement made What did you improve or what is your next step	Insert Graphs or Tables of Resulting Trends																				
<p>Performance Indicator 1 – Students will take a final exam which will measure their ability to apply statistical inference techniques to business situations; and relate macroeconomic concepts to the environment of business. SLO # 2, 3, 4, and 5.</p>	<p>Final Exam, internally administered in an 8 week course using a standardized assessment scoring sheet.</p>	<p><u>Results:</u> Fall 3 Jan-Feb. 2016 On average <u>72%</u> of the students taking the final exam met or exceeded Benchmark .</p> <p><u>Results:</u> Spring 1</p>	<p>On average the benchmark was met both terms the course was offered. In more detail, the results from the Fall 3 sections indicate a range of scores</p>	<p>Action: No actions were taken between the Fall and the Spring classes given the limited time between the two courses. However, based on the assessment results from the Fall classes, a few</p>	<p>FALL 3 TERM</p> <table border="1"> <caption>FALL 3 TERM Data</caption> <thead> <tr> <th>Location</th> <th>% students meeting or exceeding benchmark</th> </tr> </thead> <tbody> <tr> <td>Redlands</td> <td>62%</td> </tr> <tr> <td>Riverside</td> <td>92%</td> </tr> <tr> <td>Rancho</td> <td>100%</td> </tr> <tr> <td>Buena Park</td> <td>80%</td> </tr> <tr> <td>Pasadena</td> <td>85%</td> </tr> <tr> <td>South Coast</td> <td>20%</td> </tr> <tr> <td>San Diego</td> <td>95%</td> </tr> <tr> <td>Temecula</td> <td>100%</td> </tr> <tr> <td>Total</td> <td>72%</td> </tr> </tbody> </table> <p>SPRING 1 TERM</p>	Location	% students meeting or exceeding benchmark	Redlands	62%	Riverside	92%	Rancho	100%	Buena Park	80%	Pasadena	85%	South Coast	20%	San Diego	95%	Temecula	100%	Total	72%
Location	% students meeting or exceeding benchmark																								
Redlands	62%																								
Riverside	92%																								
Rancho	100%																								
Buena Park	80%																								
Pasadena	85%																								
South Coast	20%																								
San Diego	95%																								
Temecula	100%																								
Total	72%																								

<p>Measureable Goal: Our goal is that 70% of the students taking the Final Exam will meet or exceed the benchmark of 70% using a standardized assessment scoring sheet. Consistent with SLO's 2, and 5.</p> <p>Average assessment results will equal or exceed 70% of learning objectives.</p>		<p>Mar-Apr 2016 On average <u>100%</u> of the students taking the final exam met or exceeded Benchmark . <u>Note:</u> One section only.</p>	<p>across campuses and instructors from 21% to 100%, however, only two courses did not meet the overall benchmark. Generally, scores tended to be lower for the assessment questions for the statistics half of the course. Only one class was offered in the Spring term with a total enrollment of 3 students. Hence, the assessment results could be different compared to the Fall classes.</p>	<p>changes were made for the next session, starting June 2016: First, the class has been restructured, allotting a total of 4 weeks to statistics (as compared to less than 3.5 weeks), since – generally – students seemed to have had more difficulties with the statistics half. Second, a different method of economics course delivery is employed. Because of the restructuring of the course, different assessment questions for economics will be used.</p>	<p>OVERALL RESULTS</p> <table border="1"> <caption>Top Chart Data: Redlands vs Total</caption> <thead> <tr> <th>Category</th> <th>% students meeting or exceeding benchmark</th> </tr> </thead> <tbody> <tr> <td>Redlands</td> <td>100%</td> </tr> <tr> <td>Total</td> <td>100%</td> </tr> </tbody> </table> <table border="1"> <caption>Bottom Chart Data: Overall Results</caption> <thead> <tr> <th>Term</th> <th>% students meeting or exceeding benchmark</th> </tr> </thead> <tbody> <tr> <td>Fall Term 3</td> <td>~70%</td> </tr> <tr> <td>Spring Term 1</td> <td>100%</td> </tr> <tr> <td>Total</td> <td>~70%</td> </tr> </tbody> </table>	Category	% students meeting or exceeding benchmark	Redlands	100%	Total	100%	Term	% students meeting or exceeding benchmark	Fall Term 3	~70%	Spring Term 1	100%	Total	~70%
Category	% students meeting or exceeding benchmark																		
Redlands	100%																		
Total	100%																		
Term	% students meeting or exceeding benchmark																		
Fall Term 3	~70%																		
Spring Term 1	100%																		
Total	~70%																		

Appendix 8: Sample Comp-XM Assessment Results

	Analytical and/or Quantitative Skills	Critical-thinking and/or Decision-making Skills	Functional Knowledge Application Skills	Team-work and/or Leadership Skills	Ethics, Legal, and/or Social Responsibility Skills	Business Communication Skills	Cultural Competence Skills
Student 1	56%	44%	54%	53%	70%	70%	38%
Student 2	28%	23%	27%	21%	70%	50%	76%
Student 3	44%	50%	53%	37%	40%	80%	86%
Student 4	39%	31%	39%	38%	49%	60%	38%
Student 5	37%	46%	40%	68%	38%	40%	24%
Student 6	45%	40%	47%	40%	47%	70%	76%
Student 7	57%	62%	59%	55%	70%	70%	36%
Student 8	60%	51%	59%	53%	68%	70%	88%
Student 9	60%	55%	52%	50%	58%	20%	38%
Student 10	56%	65%	64%	81%	38%	50%	76%
Student 11	81%	84%	82%	91%	40%	80%	64%
Student 12	79%	72%	76%	77%	40%	80%	26%
Student 13	78%	77%	82%	78%	81%	50%	74%
Student 14	44%	49%	47%	57%	57%	60%	50%
Student 15	43%	41%	40%	55%	77%	60%	64%
Average	54%	53%	55%	57%	56%	61%	57%
Standard Deviation	16%	16%	16%	18%	15%	16%	21%

All Graduate Students	Class Median Percentile
Overall Simulation Result (Business Acumen)	19

Overall Board Query (Business Knowledge)		53	
15 students have completed the exam. Comparison Group: All Graduate Students			
	Board Query Questions	Balance Scorecard Questions	Total Points
Total Possible Points	700	500	1200
Students Average Score	383 (54.7%)	256 (51.2%)	639 (53.3%)
Functional Domain		Class Average	National Average
Accounting		52%	58%
Finance		49%	59%
Strategy		54%	60%
Marketing		62%	58%
Operations		51%	50%
HR		54%	55%

Source: Charng-Yi Chen presentation at Faculty Conference, April 2016

Appendix 9: Sample Peregrine Assessment Data

Course	Timeline	Score	ACBSP Region 7 (Western Council)	Percentile Rank in Region 7
Course	Timeline	Score	ACBSP Region 7 (Western Council)	Percentile Rank in Region 7
Total	Outbound	53.3	56.5	27
Accounting	Outbound	53.4	59.7	21
Business Ethics	Outbound	51.2	56.6	19
Business Finance	Outbound	47.1	50.8	36
Business Leadership	Outbound	56.7	61.6	23
Economics	Outbound	55.2	57.7	37
Economics: Macroeconomics	Outbound	53.7	57.6	30
Economics: Microeconomics	Outbound	56.7	58.5	42
Global Dimensions of Business	Outbound	50.7	49.8	46
Information Management Systems	Outbound	52.2	65.3	5
Management	Outbound	52.2	60.7	18
Management: Human Resource Management	Outbound	52.1	61.7	17
Management: Operations/Production Management	Outbound	49.8	57.6	25
Management: Organizational Behavior	Outbound	54.6	67.1	14
Marketing	Outbound	57.7	59.2	43
Quantitative Research Techniques and Statistics	Outbound	44.4	53.4	10
Total	Outbound	53.3	56.5	27
Accounting	Outbound	53.4	59.7	21
Business Ethics	Outbound	51.2	56.6	19

Business Finance	Outbound	47.1	50.8	36
Business Leadership	Outbound	56.7	61.6	23
Economics	Outbound	55.2	57.7	37
Economics: Macroeconomics	Outbound	53.7	57.6	30
Economics: Microeconomics	Outbound	56.7	58.5	42
Global Dimensions of Business	Outbound	50.7	49.8	46
Information Management Systems	Outbound	52.2	65.3	5
Management	Outbound	52.2	60.7	18
Management: Human Resource Management	Outbound	52.1	61.7	17
Management: Operations/Production Management	Outbound	49.8	57.6	25
Management: Organizational Behavior	Outbound	54.6	67.1	14
Marketing	Outbound	57.7	59.2	43
Quantitative Research Techniques and Statistics	Outbound	44.4	53.4	10

Note: The timeline column contains the descriptor “outbound,” which indicates that the test is being taken as an exit assessment.

Source: Chang-Yi Chen presentation at Faculty Conference, April 2016

Appendix 10: “Guidelines on Interpretation of Assessment Results”

Guidelines on Interpretation of Assessment Results

As discussed at ACBSP Planning Committee Meeting, we need to provide some information to full-time faculty to help their contribution to ACBSP Standard 4 Criterion 4.4 (“What did we learn from the assessment results?” & “Identify the areas in educational processes to improve.”).

What we may learn from our 1st round of program-wide assessments should not be limited to the “evidence” of SLOs. We should also use the data and analysis to find any implications and suggestions for the improvement of assessment process. Without an appropriate assessment process, the assessment results will be contaminated or ineffective in showing SLOs or identifying the areas that need improvements. Thus we should avoid citing and commenting on the current round assessment data based on their face value, which may cause biased interpretation and references. We should think more about how to obtain reliable and useful data in the future by improving **the components of assessment process**:

1. Identify course objectives that are closely related to and will lead to program’s missions and objectives.
2. Determine the observable and measurable SLOs to be assessed for a specific course (or program) objective.
3. Identify, select, and deploy specific assessment activities for assessing specific observable/measurable SLOs identified above in item 2.
4. Properly design assessment tools that match the assessment activities (identified above in item3) and the level(s) of SLOs to be assessed (i.e. Bloom’s : knowledge, comprehension, application, analysis, synthesis, evaluation).
5. Design the assessment tools and apply them correctly to prevent from biased results & findings.
6. The assessment results are analyzed with “proper benchmarks” and “intended outcomes.”

From these components of assessment process, we (full-time faculty) can draw references from current-round assessment results and data and make recommendations for future improvements:

- Clarify program objectives.
- Revise model syllabus to link course objectives to program objectives and/or emphasis objectives.
- Judge the effectiveness and precision of the observable/measurable SLOs to be evaluated (whether they match the learning objectives/goals that are targeted to assess).
- Evaluate and criticize the effectiveness of assessment activities (i.e. exam, term paper, simulation, research project, presentation, etc.) that were deployed.
- Evaluate and judge the effectiveness of the assessment tools:
 - Is the level of proficiency (i.e. Bloom’s) correctly assessed?
 - Are the guidelines to measure different levels of proficiency correctly stated and easy to follow?
 - Will different readers interpret the SLO and its evaluation guidelines differently?

- Is there any mechanism to ensure the consistency in using the assessment tools
 - Will there be the possibility of watering down the standard of evaluation and inflating the assessment results by some instructors?
 - Will there be the possibility of teaching to the assessment by some instructors?
 - Will the assessment tools were utilized the same way across different time and different sections (e.g., assessment exam would be given online and with specific time limit to complete).
- Are the benchmarks used for the analysis reasonable? Any suggestions to find the best practice/usage of benchmarking that will reflect the SLOs more accurately.

The answers to the above items will help us (full-time faculty) explain the wide variation and sometimes confusing data we have collected from our initial round of assessment efforts.

Prepared by CharngYi Chen, Graduate Programs Director (5/19/2016)

Glossary

ACBSP: The Accreditation Council of Business Schools and Programs. An international organization interested in innovative teaching methods, improving the delivery of business education programs, and creating values for its students.

American Association for Higher Education (AAHE). The Assessment Forum of this organization has produced a document (The Nine Principles of Good Practice for Assessing Student Learning) which forms the basis of the EAC report used by the School of Business.

Assessment: A process involving the development and implementation of a system for collecting and analyzing data in order to improve student learning.

Assessment cycle: All programs at the University of Redlands assess learning outcomes at least once over a five-year cycle, using direct evidence of student learning. Each program director submits a report to the Educational Assessment Committee detailing what has been assessed, and what the program has learned. In the current academic year (AY 2015-2016), learning criteria 2 and 5 are being assessed.

Assessment cycle: (ACBSP). ACBSP requires that for accreditation purposes, candidate institutions must analyze data from three distinct set points. Assessment is an ongoing process completed every 2-3 years thereafter.

Bloom's Taxonomy: Developed in 1956 and revised in 2001 the taxonomy is used by the School of Business to generate clear and concise statements that identify the specific knowledge, abilities, values, attitudes and skill-sets that students will possess or have mastered. Used to measure Student Learning Outcomes.

Capsim: A team-based simulation used in the MBA program.

Comp-XM: An external evaluation of students' knowledge skill-sets, used in the simulation environment; Comp-XM is exclusively used in the MBA program.

Curriculum map: A method of indicating how students are introduced to learning outcomes, how they develop their proficiencies in these outcomes and where they develop mastery for each outcome. Programs assess all learning outcomes at least once over a five-year cycle.

Educational Assessment Committee (EAC). A University-wide committee of the University of Redlands. The report entitled "Program-based Assessment: Tools and Guide" is the foundational document for assessment practices throughout the School of Business.

External Assessment: Assessment of School of Business programs and courses that involve entities external to the University of Redlands or the School of Business.

E.g., on-going program review with external reviewers/reports, Capsim, Comp-XM and Peregrine.

Formative assessment: Provides feedback and information during instructional process.

E.g., quizzes, online discussions, and essays.

Grading: Grades are not the same as assessment of learning outcomes. Grades may be correlated with learning outcomes but may often include behaviors or activities that are not learning outcomes, such as attendance, participation, improvement or effort. Grading is formative in nature and assessment is summative. Grading provides students with feedback about how they are progressing and creates a relationship between the student and the instructor. Assessment seeks to measure the assurance of learning, the skills retained and the knowledge learned in the course or program. Assessment informs faculty (as a group) and the school (as represented by the program director).

Internal assessment: Assessment procedures originating in the School of Business. E.g. Capstone projects including consultancy projects, simulation projects, and multi-functional analysis projects.

Learning goals: General statements about the aims, values or purposes of a curriculum.

Learning outcomes: Articulate what a student does that demonstrates progress towards learning goals.

Mission statement of the School of Business: A written declaration of the School of Business' core purpose and focus, aligned with that of the University of Redlands.

Peregrine: A nationally normed, summative assessment used for both internal and external academic program evaluation and benchmarking. In the School of Business, Peregrine is used exclusively as an external method of program evaluation.

Program-based assessment: An ongoing, formal and systematic assessment designed to yield evidence of what is occurring in a given program. The core focus of assessment within the School of Business.

Program review: The process of collective faculty and student reflection about the strengths, weaknesses, goals and mission of an academic program such as the MBA, MAM, BSB and BSM.

Rubric: A template that evaluates the "level or degree of proficiency" for each part and competency of a skill set.

Student Learning Outcomes (SLOs). An articulation of what a student does that demonstrates progress toward learning goals.

Summative assessment: Carried out after the learning has been completed. Typically given to students at the end of a set point to assess what students have learned, and how well.