



PROGRAM ASSESSMENT MANUAL

STEPS FOR DEVELOPING & IMPLEMENTING LEARNING OUTCOMES ASSESSMENT

Spring 2011

1.0 BACKGROUND ON ASSESSMENT AT MALONE UNIVERSITY

Due to a constellation of several teachable moments, Malone University has instituted several measures that are guiding the institute to progress rapidly on the learning curve of assessment. A full-time Director has been appointed; a reconstituted Assessment Implementation Committee (AIC) has been empowered; budget funds have been specifically detailed for assessment-related activities and comprehensive strategy to overhauling the assessment of program learning outcomes and academic support services has also been adopted. As a result, assessment reviews are now conspicuous in department and program minutes.

To promote assessment as a collective effort, several institution-wide deliberations have been organized on the issue of assessment and culture of improvement. Last, but certainly not the least, there is an on-going campus-wide effort to integrate assessment into Malone's strategic planning processes.

That is to say, guided by the university's unique mission and foundational statements, our progression on the learning curve of assessment is propelled by a campus-wide collective effort of collaboration and cooperation for the purpose of continuous and qualitative improvements in all areas of Malone's community.

2.0 STEPS FOR DEVELOPING AND IMPLEMENTING LEARNING OUTCOMES ASSESSMENT

2.1 Adopt Mission & Goal Statements

As the starting point for the development of assessment plans, program mission statement does not only set the course, but also defines the outer context for the subsequent possibilities of the assessment process. Every program must adopt an overarching mission statement that is, in the expectations of accrediting agencies, reflective, supportive and consistent with Malone University's institutional mission statement as stated below:

The mission of Malone is to provide students with an education based on biblical faith in order to develop men and women in intellectual maturity wisdom and Christian faith who are committed to serving the church, community and world.

While considering it in the context of the overarching institutional mission, the *Program Mission Statement* must be a succinct outline of the underlying principles and values that will inform the department in the follow-up adoption of program GOALS and OBJECTIVES.

In effect, a Program Mission Statement

- Must be in tune with the overall *institutional mission*;
- Is a definitive statement of *what the program is, what it does, and for whom it does it*;
- Is a highlight on the *raison d'être* of the program in the context of the institute;
- Explains the contribution of the program to the *characteristic quality of graduating students*; and
- Should be *idiosyncratic* to the specific program.

Conventionally, a Program Mission Statement must reveal the following Components

- Primary functions of the program – what are the major functions, operations, outcomes, and offerings of the program?
- Purpose of the program – why does the program engage in the aforementioned activities?
- Stakeholders – who participates in the program and who are the intended beneficiaries?

Structure/Format of a Program Mission Statement

“The mission of (*name of your program*) is to (*your primary purpose*) by providing (*summary of primary functions*) to (*your major stakeholders/beneficiaries*).

Take note that additional statements of clarification would be warranted under normal circumstances and also remember that the sequencing of the main components of the mission statement may vary from the structure indicated above.

After agreeing on a Mission Statement, the Department must adopt and clearly define its GOALS which are broad-not-to-be-measured statements about the general aims, purpose, and functions of the program. Acting as the link between a mission statement and measurable learning outcomes, GOALS express expected outcomes in general terms.

In effect, goals are broad, general, and somewhat vague statements that, unlike outcomes/objectives, do not serve the basis for the development of assessment tools/instruments.

Samples of Goal Statements

#1: Students will understand those bodies of knowledge and cultural influences that have shaped the world (General Education)

#2: Graduates will communicate effectively in multiple contexts (General Education/Communication)

#3: To provide a curriculum that includes scientific advancements and innovations in nursing and health care systems to enable our students to master the competencies required for professional practice (Nursing Program).

Traditionally, 5 – 8 goals are expected by regional accrediting agencies.

2.2 Derive/Articulate Program Intended Learning Outcomes

Student Learning Outcomes (SLOs), derived from Program Goals, are articulated statements describing knowledge, skills, abilities, and attitudes that students will be able (and expected) to demonstrate at the end of their encounter with particular lessons, courses, and programs. SLOs are in effect what faculty consider important for students to *know* (cognitive), *do* (behavioral) or *think* (affective) upon the completion of specific programs. Take note that, while program goals estimate the intentions and expectations of faculty, SLOs focus on results and what students actually learn.

Figure 1: Goals & Outcome Matrix

Goal 1	Goal 2	Goal 3
Outcome 1	Outcome 4	Outcome 8
Outcome 2	Outcome 5	Outcome 9
Outcome 3	Outcome 6	
	Outcome 7	

Figure 1 above is a demonstration that SLOs are related to and must be derived from Program Goals. Deriving/Articulating SLOs from Program Goals is a meticulous process that demands the collaborative efforts of all faculty members. It certainly requires a consensus among faculty as to what constellation of knowledge, skills, and attitudes students *must demonstrate* after program completion.

How to Develop Student Learning Outcomes – Frameworks, Guidelines & Samples

As a first step, Drucker (2003) implores faculty to think **SMART**:

Specific

- ✓ SLOs must be specific to the program
- ✓ SLOs must be critical to the program

Measurable

- ✓ SLOs must be measurable based on available resources
- ✓ SLOs must anticipate more than one measurement method

Attainable

- ✓ SLOs must be aggressive, but attainable within the circumstances of the program

Results-Oriented

- ✓ SLOs must identify clear expectation of results

Time-bounded

- ✓ SLOs must be considered within a specified time frame.

Beyond the SMART principle, Bloom’s Taxonomy of Educational Objectives (1956) offers a structured framework and a very detailed source of action verbs for the composition of Student Learning Outcomes with increasing order of complexity.

Figure 2: Bloom’s Taxonomy: Summary of Levels, Abbreviated Description & Selected Verbs

LEVEL	DESCRIPTION	VERBS
Cognitive (Key Words)	Increasing order of complexity from 1 – 6: Basic to Critical Thinking	
1. Knowledge	<u>Lowest level of learning</u> ; ability to observe and remember previously learned information	Arrange, define, describe, duplicate, label, list, match, memorize, name, recall, recognize. etc
2. Comprehension	<u>Lowest level of understanding</u> ; ability to understand information and grasp material, interpreting & contrasting.	Classify, cite, convert, defend describe, discuss, distinguish, estimate, explain, express, generalize, identify, indicate, infer, locate, etc.
3. Application	<u>Higher level of understanding</u> ; Ability to use information, learned material, methods, concepts, laws & theories in new situations.	Act, administer, apply, articulate, assess, change, chart, choose, collect, compute, construct, contribute, illustrate, relate, implement, etc.
4. Analysis	<u>Higher intellectual level</u> ; Ability to break down material and recognition of organization, structure & hidden meaning.	Analyze, appraise, calculate, categorize, compare, contrast, correlate, criticize, debate, illustrate, outline, solve, infer, test, etc.
5. Synthesis	<u>Higher intellectual level</u> ; Ability to combine parts or apply prior skills and knowledge to produce a new whole; integrate ideas into a solution.	Adapt, anticipate, arrange, compose, create, design, explain, formulate, integrate, modify, revise, validate, etc.
6. Evaluation	<u>Highest cognitive level</u> ; Ability to judge and assess the value of	Appraise, assess, conclude, criticize, decide, defend, interpret, justify,

	theories and presentations, based on their value, logic or adequacy; verify the value of evidence.	measure, predict, rate, revise, select, score, select, support, value, etc.
Affective (Key Words)	Increasing order of complexity from 1 – 5: Elementary to Dveloped	
1. Accepting	Willingness to participate in an activity or to attend to a stimulus; getting and holding the attention of students.	Ask, choose, describe, follow, give, hold, identify, locate, name, point to, reply, select, use.
2. Responding	Actively participates; demonstrates interest in & pursue an object, activity or phenomena.	Answer, assist, compile, conform, discuss, greet, help, label, perform, practice, present, read, recite, report, select, tell, write.
3. Valuing	Value or worth attached to a object, activity or phenomena; varies from simple acceptance to commitment.	Complete, describe, differentiate, explain, follow, form, initiate, invite, join, justify, propose, read, report, select, share, study, work.
4. Organization	Compare and contrast and resolve conflict to build a consistent value system.	Adhere, alter, arrange, combine, compose, complete, defend, explain, generalize, identify, integrate, modify, order, organize, prepare, synthesize.
5. Characterization by Value	Adopt a value system for a length of time that contributes to a particular “lifestyle.”	Act, discriminate, display, influence, listen, modify, perform, propose, qualify, serve, solve, verify.
Skill (Key Words)	Increasing order of complexity from 1 – 7: Basic to Higher Level	
1. Perception	Uses sense organs to obtain cues to guide action; ranges from awareness of stimulus to translating cue perception into action.	Choose, describe, detect, differentiate, distinguish, identify, isolate, relate, select, separate.
2. Set	Readiness to take action; mental physical and emotional set.	Begin, display, explain, move, proceed, react, respond, show, start.
3. Guided Response	Knowledge of the steps required to perform a task.	Assemble, build, calibrate, construct, fix, manipulate, organize, sketch, etc.
4. Mechanism	Perform task in a habitual manner with confidence.	Assemble, build, calibrate, construct, display, dissect, fix, heat, mend, etc.
5. Complex Overt Response	Skillful performance of motor acts in complex patterns.	Assemble, build, calibrate, construct, dismantle, display, dissect, mix, etc.
6. Adaptation	Skillful performance of motor acts in new situations.	Adapt, alter, change, rearrange, reorganize, revise, vary.
7. Origination	Creating new movement patterns to account for new situations/problems.	Arrange, combine, compose, construct, design, originate.

(Adapted from Bloom et al., 1956)

The SMART principle and the wide range of action verbs applied in the context of already delineated Program Goals could define the adoption of appropriate SLOs.

Samples of SLOs

#1: Students will be able to demonstrate the ability to engage constructively with diverse cultures (General Education)

#2: Students will be able to create and present audience sensitive messages (General Education).

#3: Students will be able to synthesize principles of the nursing process and critical thinking to assist individuals to achieve positive adaptation to changes in health conditions (Nursing)

2.3 Indicate Assessment Measures (Means of Assessment) & Criteria for Success

How are we going to measure our Student Learning Outcomes (SLOs), and how do we ascertain that students/graduates have achieved a certain level of excellence? While the Means of Assessment are direct/indirect performance measures, the criteria for success are the associated benchmarks for determining what “ought” to be; that is, the bar/expectation indicating excellent performance. Table 1 below presents three categories of assessment measures. To really capture the *integrated perspectives of learning*, the best practice is to adopt multiple measures for each outcome.

Table 1: Assessment Measures/Indicators

Direct	Indirect	Others
<ul style="list-style-type: none"> • Entrance (pre) and exit (post) tests • Placement tests • Portfolio assessment • Capstone experience • Standardized tests • Oral defense of thesis/projects • Oral presentations • Performance on professional exams • Papers & research projects • Essays 	<ul style="list-style-type: none"> • Exit interviews of graduates • Surveys of alumni, employers and students • Attrition rates • Length of degree completion • Grade distributions • Job placement data • Course enrolment & profiles. 	<ul style="list-style-type: none"> • Faculty-student ratio • Questionnaires asking students on program-specific issues • Enrollment trends • Student diversity

(Adapted from Ruben, B. D. 2010, p. 70.)

After deciding on a combination of measures for each outcome, the next step is to agree on satisfactory performance level/criteria for each measure. While the performance measures will enable us quantify each outcome, the performance criteria will on the other hand allow us to set

the minimum/maximum number of students who must demonstrate a predetermined level of results as a marker to both the quality of the program and the learning process.

As demonstrated by Nichols & Nichols (2005, p. 117), criteria for success could be group referenced (“an average score of...”), individually-based (“no score less than...”), or could be normative related criterion (“the average score will be at the percentile”). It could also be a combination of overall (primary) criteria that set targets for cumulative student performance or component (secondary) criteria that set expectations for specific items/scales of performance measures (pp. 118-119). No matter the approach, the bottom line is to set an ideal state of expected performance.

Samples of Means of Assessment & Criteria for Success

#1: In student research papers on diversity collected and graded by rubrics, at least 90% of the papers will be judged as proficient; not more than 5% will be considered as poor.

#2: Students would be required to prepare and present selected topics on sensitive issues and each must obtain a minimum score of 7.5 on oral presentation rubric scored by a team of instructors.

#3: The average score of graduates of the BA Nursing program on the Nursing Licensure Examination will be at or near the 60th percentile compared to national results, and the critical thinking component must not be below the 40th percentile.

2.4 Collect & Summarize/Analyze Data

Procedurally, Step 3 (iii) completes the assessment plan; Step 4 (iv) begins the real implementation of the plan! Here, we conduct the activities as outlined in Step iii, that is, we collate, summarize and analyze evidence collected from our assessment methods. During this process, it is pertinent to be mindful of the following caveats as suggested by Nichols & Nichols (2005, p. 132):

- ✓ Results must indicate the level at which outcomes were reached.
- ✓ Results must be reported in statistical summaries/averages.
- ✓ Results must directly relate to measures as detailed in Step iii.
- ✓ Results must demonstrate that assessment processes actually occurred!

In short, the collection and analysis of data must be contextualized within already stated Student Learning Outcomes (SLOs) and explained within the benchmark criteria set for determining excellence. In other words, SLOs and criteria for success *must* act as both guide and filter for collecting and analyzing data. To maximize the instrumental value of analyzed data, current results could be compared with the summary results of data collected in the immediate preceding

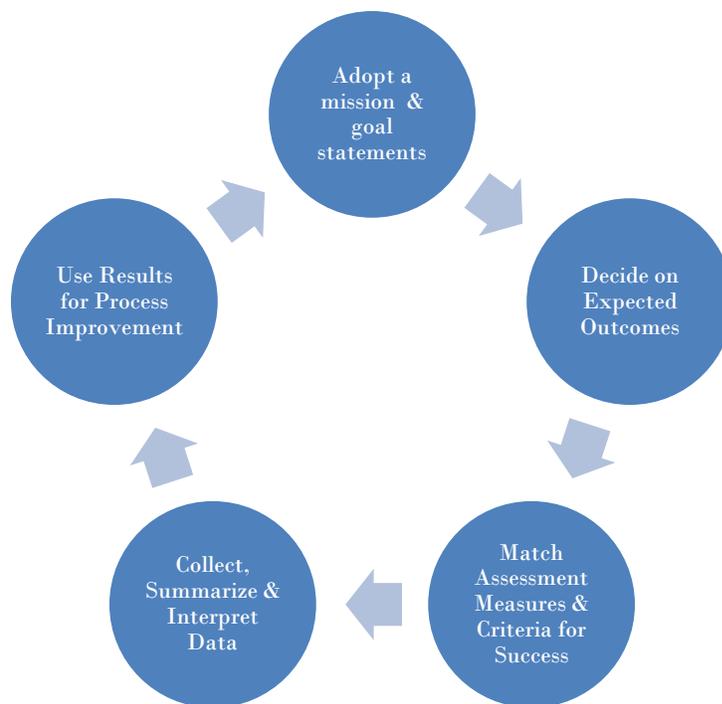
cycle. Also, it is advisable to keep the primary assessment artifacts such as tests, rubrics, surveys, etc. pertaining to specific summaries for future reference.

2.5 Use of Assessment Results – Action Plans

Take note that an assessment cycle is not complete until the results are used to institute specific actions for programmatic improvements. Here, we explain the gap between benchmark criteria and actual results (as summarized in Step iv) and indicate how the implications of the gap *informed* continuous improvement actions in curriculum, the academic process, and the assessment plan. Be careful not to issue promissory notes on the use of assessment results with “the department *will...*” phrases. The use of results must be stated in the *past*, that is, the changes for the improvement of learning outcomes should have been instituted before, or during, the preparation of the report.

Also, assessment *must* not end as a self-congratulatory exercise: even when all targets were reached, there is still room for improvements through the adoption of rigorous criteria and the use of other measures in the next assessment cycle.

Figure 3: Assessment – An Iterative Process of Continuous Improvement



Please take note that a convenient template for the presentation of assessment plans and results, in addition to rubrics for the evaluation of reports, are provided under *Templates & Evaluation Rubrics*. Also, comprehensive reference points on assessment resources and best practices are provided under *External Links*.

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