

Program Assessment 101

Academic Programs and Services

Outline of Presentation

1. Brief Information of CQIP
2. Program Assessment Training
3. Program Assessment vs TK 20 Instruction

Summary of UCM's Quality Improvement Program (CQIP)

Program student learning outcomes (SLOs) are established, measurable and externally validated.

- The program faculty use appropriate external groups that possess knowledge of the program and program needs to evaluate SLOs.
 - In the absence of an advisory council, programs may consider program SLOs established by an appropriate professional disciplinary association.
- The program faculty regularly re-validate program SLOs, to help identify changes in student learning needs.
- The program faculty document how the feedback from the validation process is used to redefine and improve program SLOs.

Summary of UCM's Quality Improvement Program (CQIP)

- **ACTION:** Programs need to annually submit meeting minutes from their Advisory Council meeting(s) and/or Faculty meeting(s) that document and describe how program SLOs were validated and changed. These can be entered in the Tk20 Document room. The program can either enter all minutes with the assessment discussion highlighted. Programs may choose to copy and paste the assessment discussion portion of their minutes. If this is done, please ensure dates are included.

Summary of UCM's Quality Improvement Program (CQIP)

The program clearly communicates the program SLOs to students and faculty (especially new faculty) including the manner by which outcomes are integrated into the degree program's curriculum and assessed.

- The program faculty clearly communicates the program SLOs to students in every course through a variety of means including university catalogs, web links, and departmentally approved syllabi.

Summary of UCM's Quality Improvement Program (CQIP)

ACTION: Programs need to annually submit their model syllabi that communicate program SLOs and confirm that program SLOs are communicated in all course syllabi. Programs need to annually submit materials or web links that demonstrate other means of communicating program SLOs (e.g. student handbook, department website, agendas of student orientation activities, etc). This can be submitted to the Document room in Tk20.

Summary of UCM's Quality Improvement Program (CQIP)

The program has an up-to-date curriculum map detailing where program SLOs are introduced, practiced/reinforced, and assessed/advanced and communicates this to students.

The program faculty regularly analyze the major program offerings and develop or modify a curricular map that identifies the courses in which specific program SLOs are introduced, practiced and assessed and communicates this information to students.

Summary of UCM's Quality Improvement Program (CQIP)

ACTION: Programs need to annually confirm that they have updated their program curriculum map in Tk20 and describe or document how this is communicated to students. The curriculum map will be part of the program's assessment plan in Tk20. Training will be provided on curriculum mapping.

Summary of UCM's Quality Improvement Program (CQIP)

The program regularly performs formative evaluations of student artifacts that indicate students' progress toward satisfactory program completion.

Formative assessment provide students information about how they are doing **before** they reach the end of their program. A good place to think about formative program assessment is at a mid-point in the program.

Summary of UCM's Quality Improvement Program (CQIP)

- **ACTION:** Programs need to annually document that selected program SLOs are assessed by a formative assessment(s)
 - How are SLOs assessed
 - In which courses are SLOs assessed
 - How are students doing on the assessment
 - Are you making changes to: curriculum, pedagogy, assessment methods, etc.
 - This information should be entered into the Tk20 system as part of Measures, Results, and Actions

Summary of Central's Quality Improvement Program (CQIP)

The program regularly performs summative evaluations of student artifacts that demonstrate students' mastery of program outcomes.

Summative assessments provide students information about how they are doing when they reach the end of their program

Summary of Central's Quality Improvement Program (CQIP)

ACTION: Programs need to annually document that selected program SLOs (ideally all outcomes) are assessed by a summative assessment(s)

How are SLOs assessed

In which courses are SLOs assessed

How are students doing on the assessment

Are you making changes to: curriculum, pedagogy, assessment methods, etc.

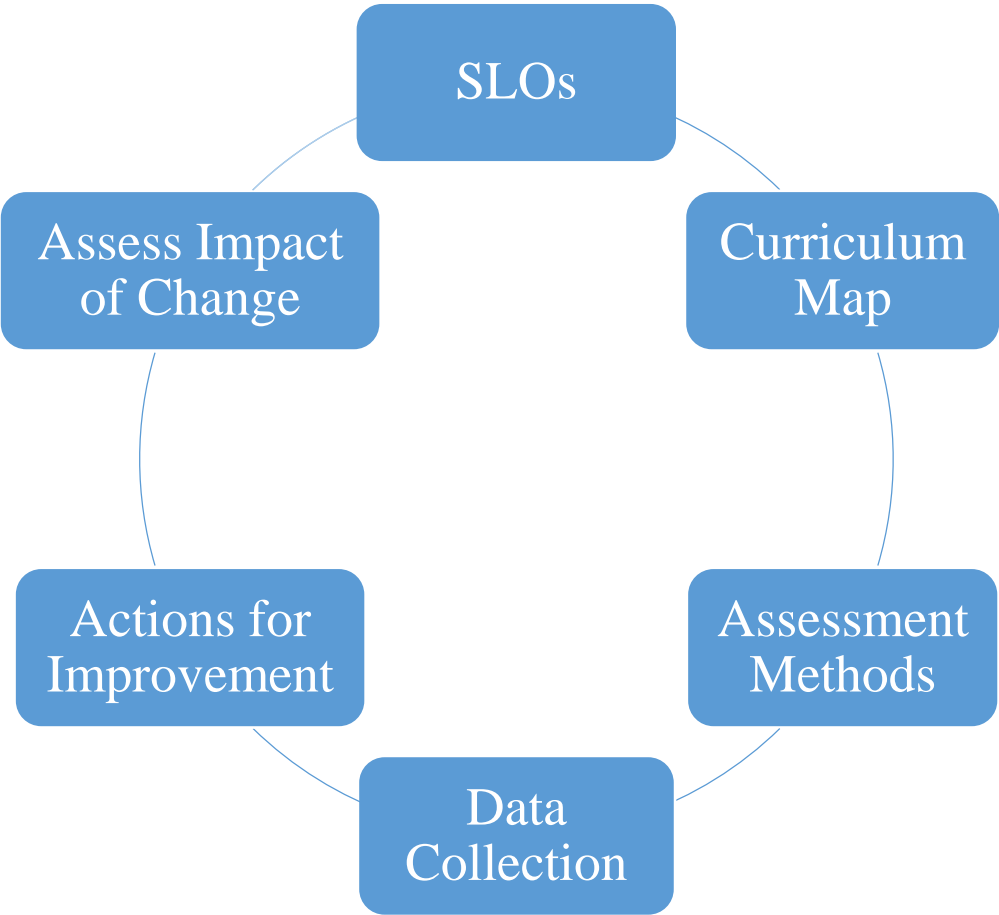
This information should be entered into the Tk20 system as part of Measures, Results, and Actions

Why We Assess

Improve student learning

External

Assessment Cycle



Levels of Assessment

Institutional Assessment (Gen Ed Assessment)

Program Assessment (CQIP in Tk20)

Course Assessment

What Do I Do in Tk20 for Program Assessment

Step 1: Student Learning Outcomes (SLOs)

Step 2: Curriculum Map

Step 3: Assessment Methods – Measures and Benchmarks

Step 4: Data Analysis – Results

Step 5: Actions for Improvement

Step 6: Impact of Actions

Step 1: SLOs

- **SLOs** are concrete actions the student should be able to perform as a result of participation the program.
- **SLO formula: Action Verb + specialized knowledge, skills and dispositions**
- **Look at the examples and decide the levels of learning**
 - Student will be able to **describe** the problem solving process.
 - Students will **solve** research problems through the application of scientific methods.
 - Students will **analyze** the strengths and weaknesses of empirical research and theories in kinesiology.

Tips for SLOs

- Keep the SLO simple, should be a broad, single and measurable statement.
- Words such as understand, know, or appreciate should be avoided because these are not measurable.
- 3-5 general outcomes for each program – pick most important (exception will be specialized accreditation requirements)

Step 1: Suggested Reviewing SLOs

- Use DQP to update your SLOs and document in meeting minutes.
 - 2015-2016: 15 program revised SLOs.
- Use reference of actions verbs from handouts.

Step 1: SLOs

Questions?

Step 2: Curriculum Map

- The Curriculum Map: A matrix that represents how courses are aligned with program student learning outcomes.
- The purpose of a curriculum map is to assure that all of the SLOs are being addressed somewhere in the required coursework for that program.
- Each program SLOs should have courses to address at **Introduced (I), Reinforced (R)/Practiced, and Assessed (A)**.
 - **Introduced:** Provide learning opportunity of new knowledge
 - **Reinforced:** Practice the knowledge from introduced level
 - **Assessed:** Formally assess the SLO and gather data for entry into Tk20

Step 2: Curriculum Map

Below are some possible versions of I,R and A within a program SLO.

Program course	Program SLO1	Program SLO2	Program SLO3
Course 1000	I	I, R	I
Course 2000	I	I, R	R
Course 3000	R	A	R
Course 4000	A	A	A

Step 2: Curriculum Map

Find the mistakes in the sample curriculum map

Program course	Program SLO1	Program SLO2	Program SLO3	Program SLO 4
Course 1	A		R	
Course 2	I		I	
Course 3	R	R		
Course 4				
Course 5		A	A	

Step 2: Curriculum Map

Questions?

Step 2: Practice

Use the sample grid and put your program courses into the appropriate outcomes and level of mastery: I (Introduced), R(Reinforced) or A(Assessed) (5 minutes)

Work in your group and share your curriculum map with your peers and discuss. (10 minutes)

Step 3: Assessment Methods Measures & Benchmarks

- Each program outcome needs to conduct both formative and summative assessment.
- Programs may use a combination of direct and indirect measures to provide a complete picture of student performance.
 - **Direct measures** of assessment indicate the attainment of student learning, knowledge, or skills by **directly observing students' demonstration of knowledge, skills, and learning.**
 - **Indirect measures** of assessment focus on **student perceptions of learning** and often involve surveys, interviews, or focus groups to ask students to self-report or reflect on their learning rather than to demonstrate it.

Step 3: Practice

Have a look at the handout and decide the sample methods good for formative or summative, and direct and indirect assessment (5 minutes)

Helpful hints for Selecting Assessment Methods (Measures and Benchmarks)

- Choose assessment methods that will provide useful information

What are the short comings of this example?

- **Outcome:** Students completing the Hypothetical Engineering program will demonstrate competence in conducting research.
- **Assessment method** (Measure & Benchmark): 90% of all graduates will successfully complete the Senior Design project. (Benchmark)

- Choose assessment methods that matches with learning outcomes

What are the short comings of this example?

Outcome: Students completing our program can explain concepts and theories in our discipline

Assessment method (Measure & Benchmark): Each course requires students to examine different terms, all the embedded questions followed this format: Define four of the following five terms:

Helpful hints for Selecting Assessment Methods (Measures & Benchmarks)

- It is up to the program to determine what are acceptable benchmarks for its discipline.
 - Internal benchmark: 75%-80%
 - External benchmark: It is up to program.

Sample SLOs and Measures: Business Administration - M.B.A

- **Outcome:** Application of Advanced Theoretical Concepts & Knowledge Students will apply advanced theoretical concepts and knowledge from business functional areas in analyzing and solving practical problems
- **Measure:** Students' will demonstrate advanced theoretical concepts and knowledge by defining alternate methods of cost allocation, calculating breakeven points, and calculating target profits. Performance will be measured in ACG 6425 using an exam and/or case. Analysis will consist of scores obtained on an exam or using the rubric in Appendix A. Results will indicate that 80% or more of the students will earn a score of 80% or higher on the exam, or competent or above (6 or higher) on the rubric, to demonstrate mastery of this outcome

Sample SLOs and Measures: Finance - B.S.B.A

Outcome: Analytical Reasoning. Students in the Finance BSBA degree program will demonstrate analytical reasoning skills.

Measure: Finance students will demonstrate analytical reasoning/problem solving skills by answering specified questions on the Bloomberg Aptitude Test (BAT). Students are expected to score at or above the BAT mean on the Analytical Reasoning section of the exam. Our students' results will also be compared to student performance in the previous year, with the goal being improvement each year.

Step 3: Assessment Methods Measures & Benchmarks

Questions?

Step 3: Practice

10 minutes Break

Step 4: Data Collection, Analysis and Results

Course	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6
1000	I	I		I		I
1000		I	I	I	I	
2000	I		I	I		I
2000		I		I	I	
3000	R	R		R		R
3000		R	R	R	R	R
4000		A		A	A	
4000	A	A	A	A	A	A

Step 4: Data Collection, Analysis and Results

Course	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6
1000	I	I		I		I
1000		I	I	I	I	
2000	I		I	I		I
2000		I		I	I	
3000	R	R		R		R
3000		R	R	R	R	R
4000		A		A	A	
4000	A	A	A	A	A	A

Step 4: Data Collection, Analysis and Results

- You must analyze your data!!! → Course-embedded assessment
- Analyzing quantitative data: Use both numbers and percentages
 - Percentages are easier to understand and more meaningful than raw numbers. Percentages make it easier to compare groups of different sizes, e.g., when you compare your current class again a class four years ago or against peers at other schools.

Step 4: Data Collection, Analysis and Results

- Analyzing qualitative data: Qualitative results from reflective writing, open-ended survey questions, and focus group transcriptions can be summarized through grouped listings and thematic analysis.

What was the one thing that was most useful for you to learn in this session?

Interaction with peers (five comments)

- Discussing with peers
- Learned from classmates
- It was helpful interacting with each other.
- Different perspectives within group discussions
- Group work on topics

Teacher presentation (three comments)

- Lecture on subject matter
- Examples of practical implications
- The PowerPoint slides are really helpful.

General (two comments)

- A great learning atmosphere
- Interesting topics

Step 4: Data Collection, Analysis and Results

Presenting analysis

- Tables and graphs are useful in presenting analysis because they focus attention to specific results.
- When sharing the results of program assessment, it may be useful to align assessment results with any program outcomes and discuss the implications of the data as they relate to the program outcomes.

Step 4: Data Collection, Analysis and Results

- Presenting analysis examples: Good, Better and best?

Students meeting or exceeding the performance standard for ethical reasoning

35

Students meeting or exceeding the performance standard for ethical reasoning

Below standard

Met standard

Exceeded standard

5

20

15

Students meeting or exceeding the performance standard for ethical reasoning

Below standard

Met standard

Exceeded standard

12.5% (5)

50% (20)

37.5 % (15)

Step 4: Data Collection, Analysis and Results

Writing the assessment results

- How data were collected and who collected it e.g. all sections of Econ 1010
- Interpretation
- Connecting findings to program learning outcomes

Step 4: Examples

Management BSBA

- **Assessment method:** Students will identify interpersonal management styles and describe their impact on individual and team behavior by answering a set of embedded exam questions, chosen by the instructor to reflect the learning outcome. A minimum of 70% of students responding to the assessment questions will achieve at least 70% of the items correct.
- **Results:** During the 2012-13 academic year, students met the 70% performance target for this measure (Mean: 74%, 38/49 (78%) scored 70% or higher). The results also showed significant improvement over those obtained in 2011-12, in which the mean score was 68% (N=20), and where only 9 students achieved the 70% criterion or higher (45%). Last year, faculty noted that there were only two assessment questions, which meant that students had to get both correct to meet the target.

Step 4: Examples

Accounting BSBA

- **Assessment method:** Accounting majors will demonstrate knowledge of the roles and responsibilities of the professional accountant in society.
- **Measure:** Students in ACG 4651 demonstrated their understanding of professional accountants' responsibility to society. Measurement consisted of analysing their responses on exam questions. Analysis will indicate that 70% or more of the students who were assigned the exam questions will earn a score of 70% or higher.
- **Results:** 90 % (292) of students earned a score of 70% or higher.

Step 4: Data collection, analysis and results

Questions?

Step 5: Actions for Improvement

- **Share assessment results** with all program faculty and discuss them together, so that any changes can be decided on collectively.
- **Develop a timetable** for implementing changes and for following up to see if the change had the intended effect.
- **Decide** on the program's focus for the **next assessment task**.
- Look at **the most positive results** and consider **what practices** may have contributed to these results.
- Look at **the least positive results** and consider what change in practice might **remedy** the situation.

Step 5: Actions for Improvement

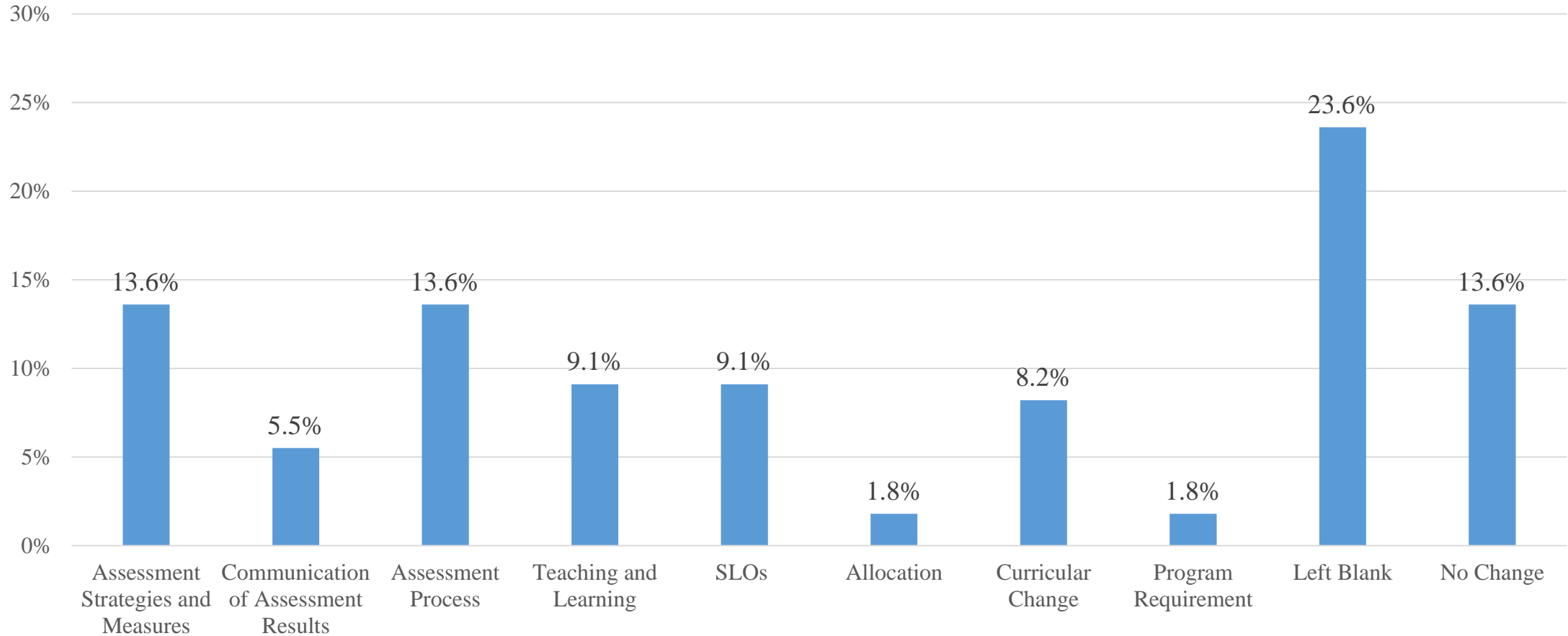
Examples of Types of Actions that Can Be Taken

Process-based: Change your **process of assessment** such as your assessment measures or the sample you are using → **Have indirect impact on program quality**

Finding-Based: Make changes based on the **evidence of student learning** → **Have indirect impact on program quality**

- **SLOs:** Revisiting/changing program SLOs
- **Curricular changes:** Adding, deleting a course or change in the curriculum map.
- **Assessment strategies and measures:** Adjust the benchmark
- **Teaching and learning:** Revise/Modify the content of a course, pedagogy (delivery methods) or learning activities

ACTIONS FOR IMPROVEMENT - 2015-2016



Step 5: Actions for improvement

Have a look at the handout for examples of actions for improvement

Have a look at the handout for examples of assessment reports

Step 5: Actions for Improvement

Questions?

Step 6: Impact of Actions

You have just determined your action, so it is too early to know what the impact of these actions will be. What do we do?

- Put in place for a year and monitor
- At end of year, assess your action(s)
- What happened to student learning relative to your previous results. (Higher, lower, no change)

Step 6: Examples

- **Accounting BSBA**
- **Assessment method:** Accounting majors will demonstrate knowledge of the roles and responsibilities of the professional accountant in society.
- **Measure:** Students in ACG 4651 demonstrated their understanding of professional accountants' responsibility to society. Measurement consisted of analyzing their responses on exam questions. Analysis will indicate that 70% or more of the students who were assigned the exam questions will earn a score of 70% or higher.

Step 6: Examples

Year	Sample Size	Mean Score	Count and Percent Meets or Target
2012-13	292	745	211 (72%)
2013-14	338	74%	23 (68%)
2014-15	73	90%	69 (95%)

Step 6: Examples

Action Taken or Strategy implemented:

- The Accounting Department has added two instructors for ACG 4651 (for a total of three; last year there was only one). One effect of this change was to substantially reduce class size.
- Shifted the course focus to be more balanced between theory and application. A new simulation-based assignment was also implemented this year.

Improvement: During 2014-15, student performance was very good, meeting the 70% target. More importantly, student performance changed from 72% in 2012-13, declined to 68% in 2013-14, and then showed significant improvement in 2014-15 to 90%. Thus, adding two instructors and emphasizing more application skills showed a very positive effect on performance.

Step 6

Questions?

Program Assessment vs TK 20 Instruction

Handouts: Instruction on how to enter data of program assessment into
TK 20

Program Assessment vs TK 20 Instruction

Questions?

If you have any questions or need to have a follow up support, please
contact

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Thank you for your participation!