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

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.

• 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.

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.

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.

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.

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 plant in Tk20. Training will be provided on curriculum mapping.

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.

- 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

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

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



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 1: Practice (10 minutes)

Review your program SLOs and see what you can improve?

- 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

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

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

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	Ι		Ι	
Course 3	R	R		
Course 4				
Course 5		Α	Α	

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.

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: Early Childhood Development and Education - B.S Outcome 1

• Candidates will demonstrate knowledge, skills and dispositions related to instructional design and lesson planning.

Measure 1

• Ninety percent (90%) of program candidates completing their Internship (initial attempt) will receive a Proficient or higher rating for Florida Educator Accomplished Practice (FEAP) Instructional Design and Lesson Planning on their Internship final evaluation by the University Coordinator using the Internship Assessment Rubric.

Sample SLOs and Measures: Educational Leadership - Ed.S

Outcome

• Candidates will demonstrate their ability to analyze school or classroom data.

Measure

• All candidates will show competency in their ability to analyze data, by achieving a rating of at least 4.1 out of 5 possible points on an assessment for analysis and interpretation of school or classroom data utilizing a project grading design template.

Step 3: Assessment Methods Measures & Benchmarks

Questions?

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)



10 minutes Break

Step 4: Data Collection, Analysis and Results

Course	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6
1000	Ι	Ι		Ι		Ι
1000		Ι	Ι	Ι	Ι	
2000	Ι		Ι	Ι		Ι
2000		Ι		Ι	Ι	
3000	R	R		R		R
3000		R	R	R	R	R
4000		А		А	А	
4000	А	А	А	А	А	А

Step 4: Data Collection, Analysis and Results

Course	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6
1000	1					1
1000		1	Ι	Ι	I	
2000			1	Ι		
2000				I	I	
3000	R	R		R		R
3000		R	R	R	R	R
4000		А		A	А	
4000	A	А	А	A	А	A
Step 4: Practice (10 minutes)

Use your curriculum map to decide on assessment

- Where should formative assessment occur?
- Where should summative assessment occur?
- What will be your measures and benchmarks for these assessments?

- You must analyze your data!!! \rightarrow 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.

• 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

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.

• Presenting analysis examples: Good, Better and best?

Students meeting or exceeding the performance standard for ethical reasoning			
35			

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Students meeting or	exceeding the performa	nce 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)			

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

ELEMENTARY EDUCATION - BSE

• Assessment method: The Missouri Content Assessment (MoCA) is the required certification assessment for teacher candidates in Missouri. The test for elementary candidates seeking certification in grades one through six is composed of four subtests: ELA, mathematics, science, and social studies. Candidates must achieve a passing score on each subtest to be certified.

• **Results**: The mean scores for candidates completing the Missouri Content Assessment for Elementary Educators are shown on the attached data table. Our clinical pathway students performed at a higher level than those candidates in the blended pathway. The mean score on each subtest for clinical candidates exceeded the minimum passing score. For blended candidates, only the mean math subtest score exceeded the minimum passing score. We are now requiring candidates to complete additional content courses and we believe this will assist our candidates as they complete this assessment.

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 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.
- **Results**: 90 % (292) of students earned a score of 70% or higher.

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 \rightarrow **Have indirect impact on program quality**

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

Curricular changes: Adding, deleting a course or change in the curriculum map.

Teaching and learning: Revise/Modify the content of a course, pedagogy (delivery methods) or learning activities

Step 5: Actions for improvement

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

ACTIONS FOR IMPROVEMENT - 2015-2016



ACTIONS FOR IMPROVEMENT- COE 2015-2016



■ Institution ■ COE

AVERAGE SCORE OF PROGRAM ASSESSMENT RUBRIC-INSTITUTION & COLLEGE



■ Institution ■ COE ■ CAHSS ■ CHST ■ HCBPS

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.



Questions?

Program Assessment vs TK 20 Instruction

Assessment website

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!