

# **Building, Sustaining, and Improving an Institutional Academic Assessment System**

**IUPUI Assessment Institute  
October 23, 2018**

**Timothy S. Brophy – Professor and Director, Institutional Assessment,  
Office of the Provost**

**University of Florida, Gainesville, Florida**

# Today's Goals

- **System Building**
  - review elements of effective assessment systems in the context of sustained excellence
  - Share the components of the University of Florida Academic Assessment System
- **System Improvement**
  - Ongoing research and evaluation of the system that leads increases effectiveness



# Shared Challenges

# Shared Challenges for Building Assessment Systems

## Institutional size and scope

- Multiple colleges/departments
- Diverse programs - Certificate, Undergraduate, Graduate, and Professional
- Available personnel

## Institutional consistency

- Outcomes
- Assessment reporting
- Cycles of planning and reporting

# Shared Challenges for Building Assessment Systems

## Management and Tools

- Faculty assessment resources
- Templates, guidelines
- Professional development for faculty

Honoring unit autonomy, disciplinary distinctions, and institutional requirements

Faculty comportment



# **System Building**

# What is an *Assessment System*?

The Assessment System is a coordinated and carefully designed set of processes and tools used by university accreditation coordinators, administrators, and faculty to submit, review, store, and access academic program assessment plans and assessment data reports

Reliability and validity procedures are built into the system at the institutional level to ensure data integrity and appropriate inferences pertaining to institutional effectiveness

```
graph LR; A[The Assessment System is a coordinated and carefully designed set of processes and tools used by university accreditation coordinators, administrators, and faculty to submit, review, store, and access academic program assessment plans and assessment data reports] --> B[Reliability and validity procedures are built into the system at the institutional level to ensure data integrity and appropriate inferences pertaining to institutional effectiveness]; B --> A;
```



# Institutional framework

Purpose, Mission, and Vision



# Establish Purpose and Mission

## **Purpose – Why you exist**

The purpose of Institutional Assessment is to support the University of Florida's mission by establishing, maintaining, and refining the university's institutional effectiveness and assessment processes.

## **Mission – What you do**

The mission of Institutional Assessment is to lead the university's efforts in accreditation and institutional effectiveness, assessment support, and to maintain transparent communication with all UF stakeholders.

# Develop your vision

## **Vision – Your mission achieved with excellence**

We envision the University of Florida as an institution where all units and academic programs contribute to the fulfillment of the university mission by establishing goals and outcomes, regularly assessing these with valid, reliable measures, analyzing and interpreting the data collected, and using the results for continuous improvement.

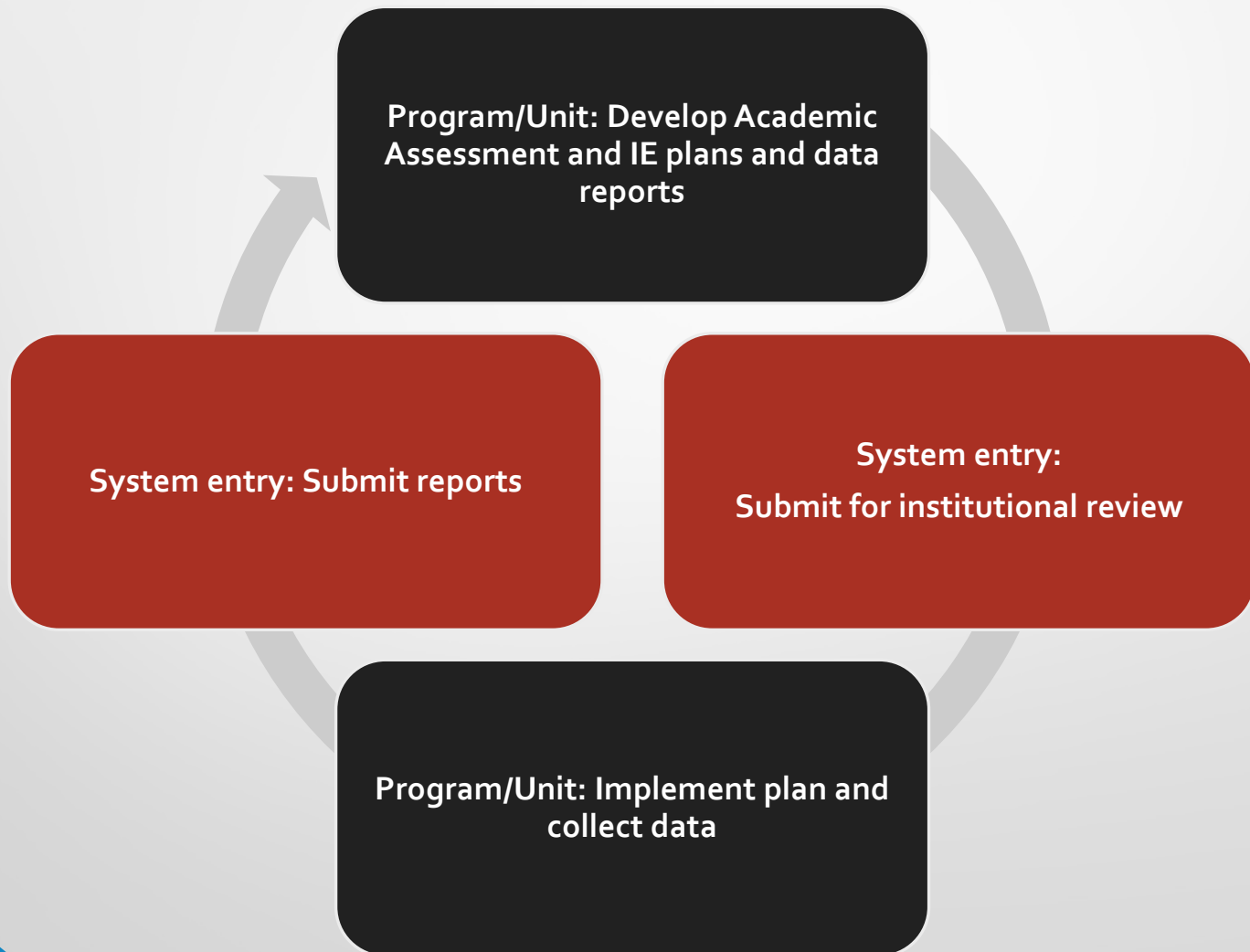


# System Inputs

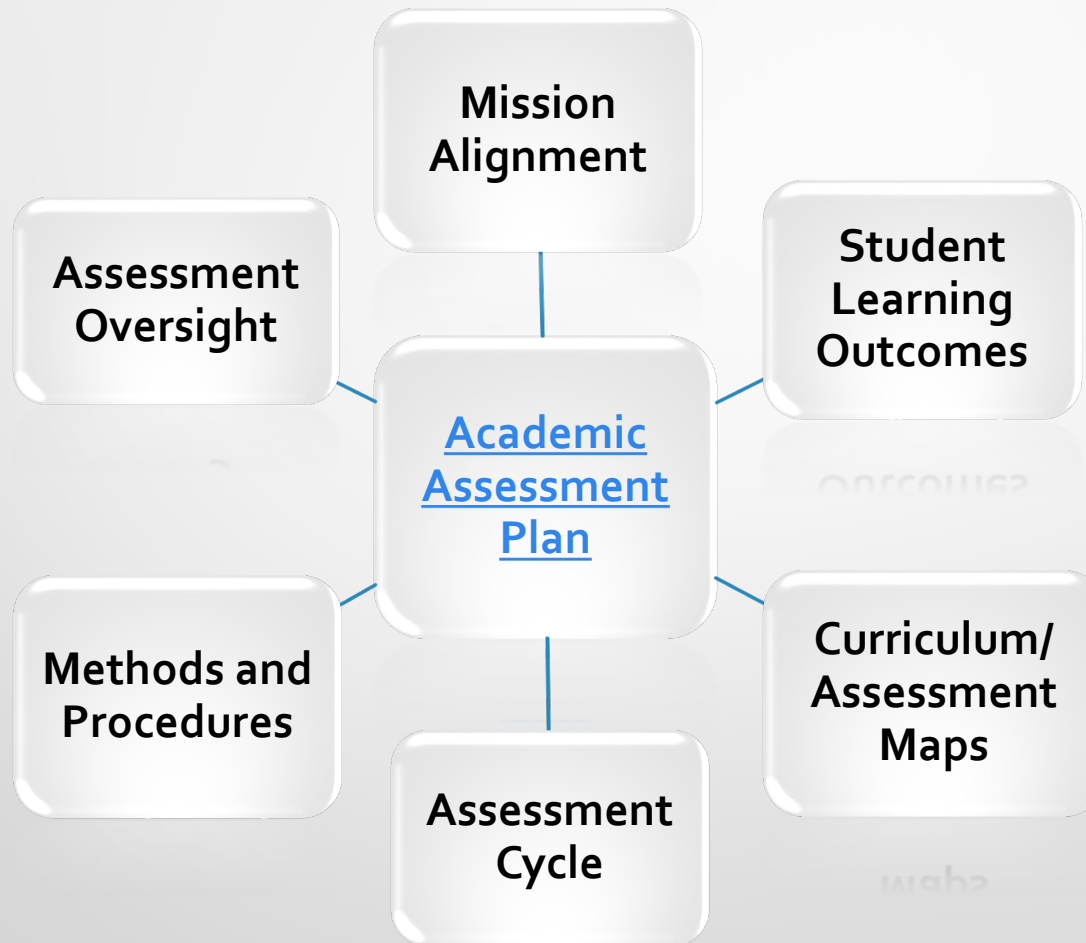
# Data Sources

- Our system inputs come from two different programs
  - accreditation planning and reporting program
  - our internal UF approval system is used for submission of new and modifications to existing Academic Assessment Plans
- There is an established institutional cycle for inputting this information

# Institutional Macrocycle



# The Academic Assessment Plans



# Institutional Effectiveness Plans



# Data Reports

Over 500 reports annually

Results are reported for each of the SLOs and Goals

Use of Results for program improvement is reported holistically





# System Processes

# Communication

We use a *distributed leadership* model

Each of our 16 colleges, 4 Senior Vice Presidential units, 10 Vice presidential units, the Graduate School, The Libraries, and the Florida Museum of Natural History all have appointed accreditation Coordinators

These individuals meet as a group when needed, usually twice a year

We communicate with them, they communicate to their faculty and administration

# Faculty oversight

Institution- level Academic Assessment Committee

Joint committee – four members from the Senate, four appointed by the president, one student, and several liaisons

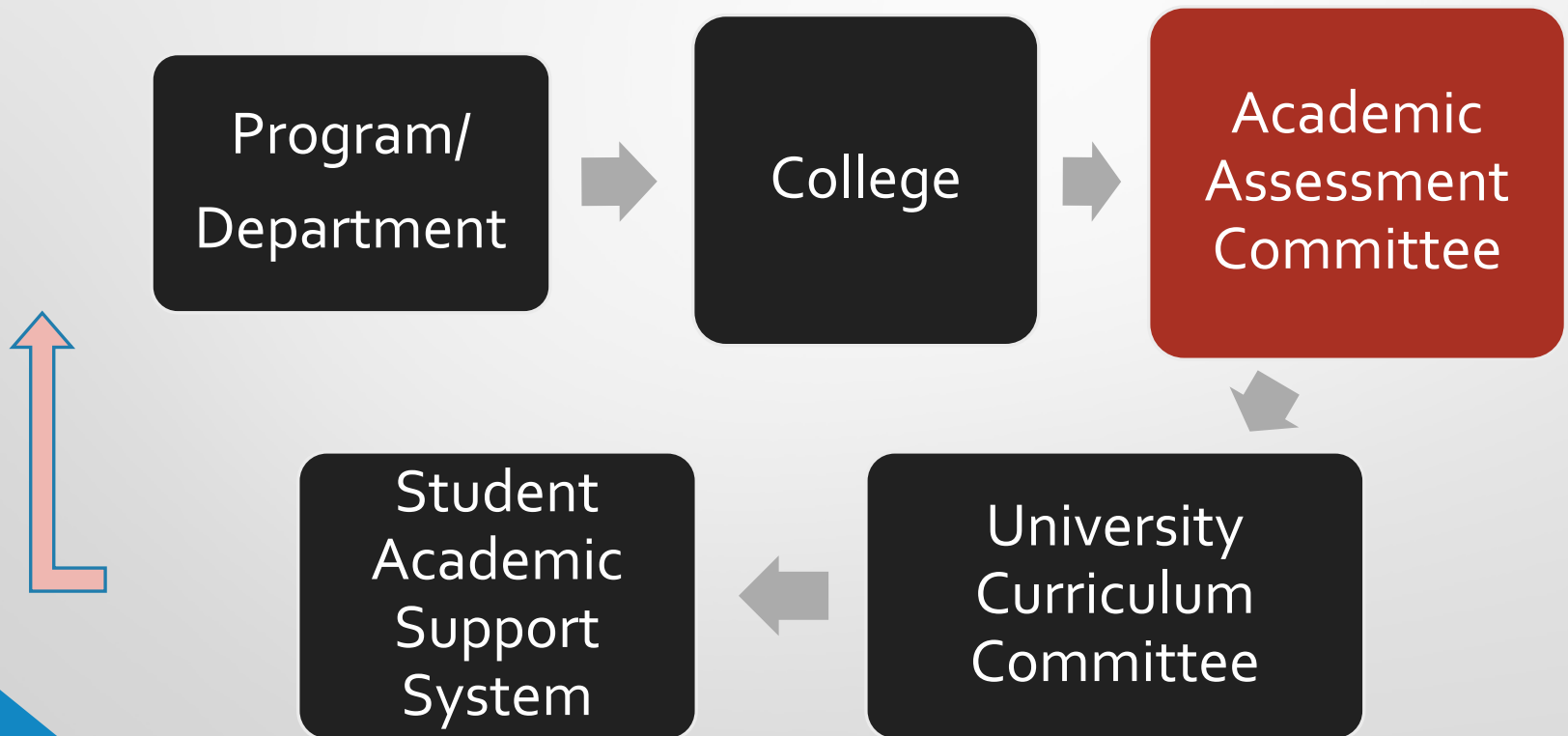
Duties:

Review and approve Academic Assessment Plans, including Student Learning Outcomes

Improve the efficiency of Institutional Assessment processes

# Approval and Management Process

The University of Florida Assessment Plan Approval Process

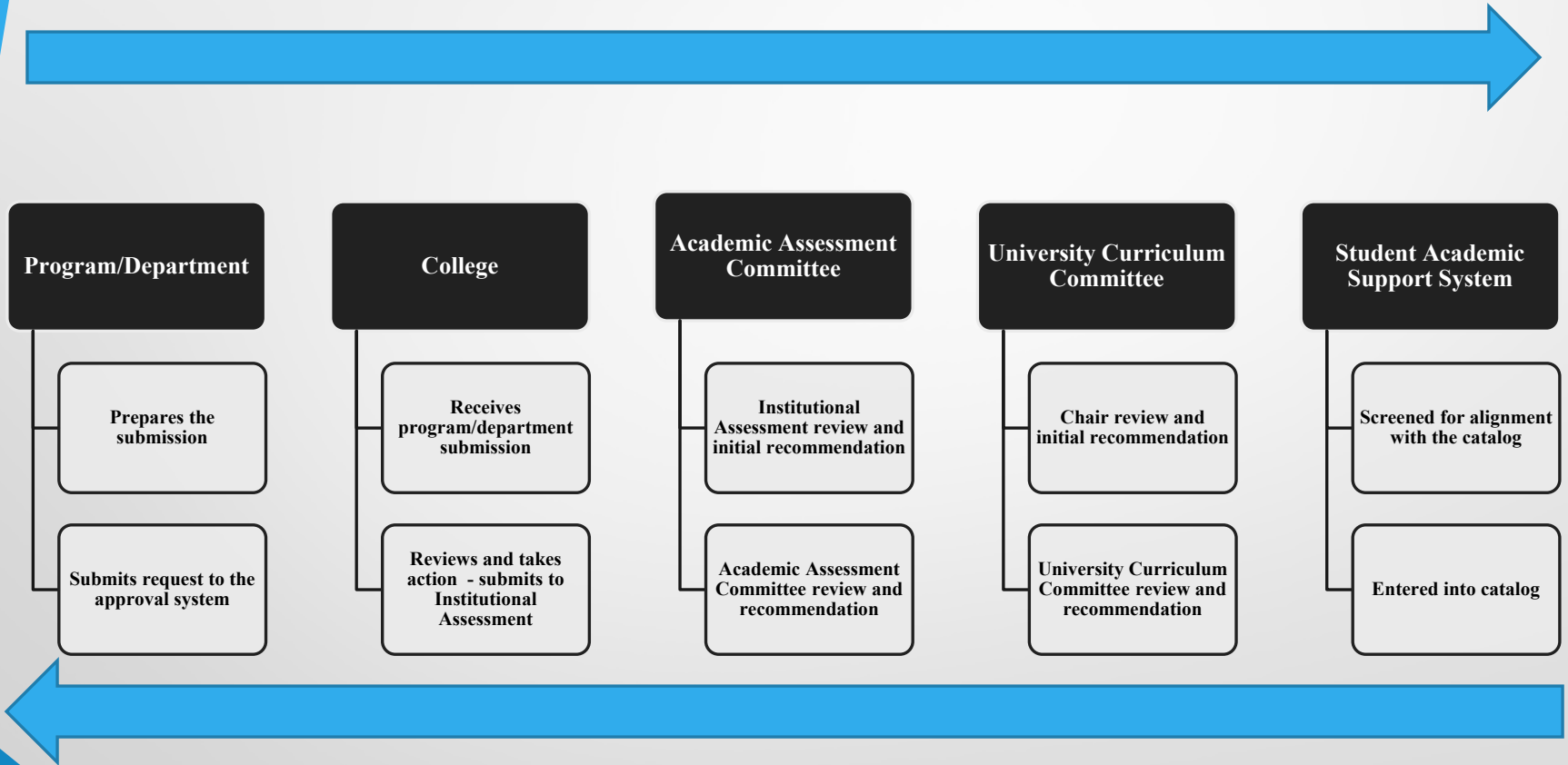


# Committee Review

Student learning outcomes – to ensure they follow UF guidelines

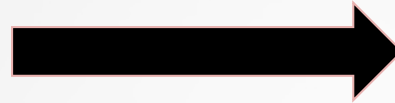
- Student Learning Outcomes reflect the curriculum, the discipline, and faculty expectations; as these elements evolve, learning outcomes change.
  - *Recent* – the outcome reflects current knowledge and practice in the discipline.
  - *Relevant* – the outcome relates logically and significantly to the discipline and the degree.
  - *Rigorous* – the degree of academic precision and thoroughness that the outcome requires to be met successfully.
- Distinguish outcomes from outputs
- Distinguish outcomes from program goals
- Ensure that outcomes are measurable and valid for the SLO

# SLO/AAP Approval Process

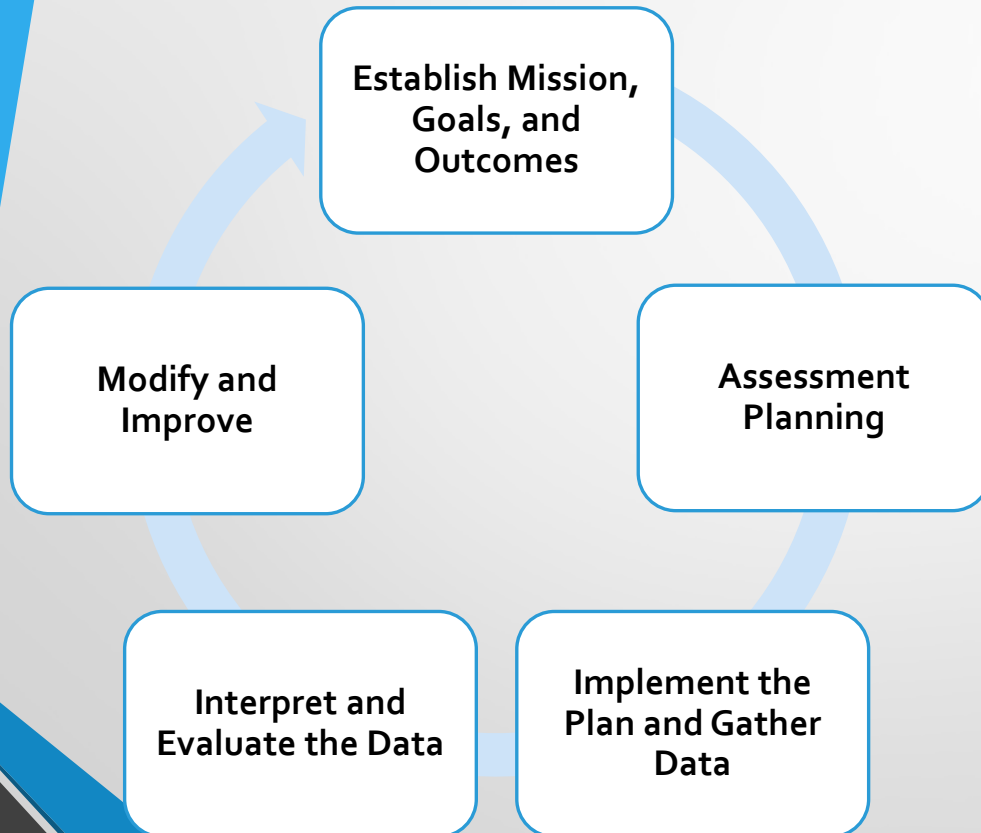


# Assessment and Data Reporting

Assessment and Institutional Effectiveness



Data Reporting



November 1 – all reports are due



# Validity, reliability, and Fairness



# Validity

Validity is “a unitary concept – it is the degree to which all the accumulated evidence supports the intended interpretation of test scores for the proposed use.” *APA/AERA/NCME, Standards for Educational and Psychological Testing, 2014.*

For institutional assessment, the evidence is SLO data (the ‘test scores’) and the proposed use of this data is to determine the degree to which an SLO has been met by students in the program.

Interpretation – the faculty set thresholds of acceptability, and make inferences from the SLO data as to the degree to which their students achieve the SLO.

# Checking for Validity at the Institutional Level

All plans and data reports are reviewed by Institutional Assessment staff

All measures of goals and SLOs are reviewed to ensure that they lead to data pertinent to the goal or outcome (validity)

If there are questions, the plan or report is returned for modification or clarification

# Reliability/Precision and Fairness

- In its broadest sense, “reliability refers to the consistency of scores across replications of a testing procedure...this is always important...and the need for precision increases as the consequences of decisions and interpretations grow in importance.”
- Fairness has to do with “equitable treatment of all test takers, lack of measurement bias, equitable access to the constructs as measured, and validity of individual test score interpretations for the intended uses.”

*APA/AERA/NCME, Standards for Educational and Psychological Testing, 2014.*

# Checking for reliability/Fairness at the institutional level

Reliability and Fairness of SLO assessments is the responsibility of the academic program faculty – we do not monitor this

Faculty have access to the built-in reliability functions of our Learning Management System (Canvas) – they can program the LMS to collect data on their program SLOs

The General Education SLOs are also programmed at the course level to provide institutional data through the LMS

We do monitor the reliability of our Quality Enhancement Plan measures, which are administered institutionally



# System Outputs

# SLO Approvals

Program leaders are informed via automated email on any actions taken by the Academic Assessment Committee

Options we use are:

- Approve
- Comment
- Conditionally Approve
- Table (rarely used)
- Recycle
- Denied

# Constructive feedback

We provide feedback on all data reports and request modifications if needed.

We allow 2-4 weeks for the modifications to be completed

Most common requests:

- report improvement actions as a decision made based on the review of results, in the past tense
- Remove any future tense phrases in the improvement actions

# Examples of Feedback

## Art History (PhD) (program goal and SLO report)

- *Excellent data summaries and documentation. PG<sub>1</sub>, PG<sub>2</sub>, PG<sub>3</sub>, PG<sub>4</sub>, PG<sub>5</sub>, PG<sub>6</sub>, SLO<sub>1</sub>, SLO<sub>2</sub>, SLO<sub>3</sub>, SLO<sub>4</sub> - slightly revise Use of Results to read as a decision made based on the use of results (past tense).*

## College of Pharmacy (Institutional Effectiveness report)

- *Your report of Actions for Improvement for Goals 1 and 4 do not follow our guidelines for reporting. Please include who reviewed the results, and state the actions to be taken as results of decisions made based on the review. Refer to your Goals 2 and 3 Actions for Improvement as examples of how this should be reported. Please avoid using any future tense phrases (will do, plan to do, etc.)*





Ongoing Improvement

# Our Research

## Patterns emerged from the annual data reports

- Inconsistencies across programs
- Lack of understanding of institutional processes

## Anecdotal evidence from the SACSCOC Coordinators

- Individual reports from coordinators about activity in their colleges and units

## Academic Assessment Committee interest

# Phase 1: Survey of the College SACSCOC Coordinators (Das & Gater, 2015)

## 1. Started with validated survey

- Welsh, J. F., & Metcalf, J. (2003). Cultivating faculty support for institutional effectiveness activities: Benchmarking best practices. *Assessment & Evaluation in Higher Education*, 28(1), 33-45. doi:10.1080/02602930301682

## 2. Modified to delete items and add our own items

## 4. Created on-line survey and sent link via e-mail

## 5. Response Rate = 11 out of 17 = 65%

# Results – Survey

Question	Results
Program goals and/or student learning outcomes will be an important component of SACSCOC accreditation well into the future.	100% agreed
Efforts to evaluate the effectiveness of my college's degree program goals and/or student learning outcomes are worthwhile.	95% agreed
Analyzing program goals and/or student learning outcomes are not an important component of my job responsibilities.	91% agreed
Program goals and/or student learning outcomes are primarily the responsibility of university staff outside my college.	57% agreed; 43% disagreed

# Results – Survey

Question	Results
Program goals and/or student learning outcomes in my college is, or would be, strengthened by active participation by faculty members.	100% agreed
Developing program goals and/or student learning outcomes is a fad that will likely be replaced by another area of emphasis.	91% disagreed
Documenting program goals and/or student learning outcomes should be an integral element to any college or department-specific SACSCOC accreditation criteria.	86% agreed
Resources dedicated to program goal and/or student learning outcome activities are investments in the long-term effectiveness of my college.	81% agreed

# Improvements

- Office of Institutional Assessment modified annual professional development and services for our coordinators
  - Emphasized that we support PD initiatives in the field (one-on-one, small groups, telephone support)
  - Customized professional development for the coordinators and increased its frequency

# Phase 2: Stakeholder Interviews (Das & Gater, 2016)

Structured interviews with college representatives, stakeholders responsible for assessment data

- What duties comprise your role/job?
- Describe annual data collection process.
- How do you deliver training?
- How do you motivate faculty? New faculty?
- What do you do when data is not entered or entered inadequately?
- Any tips/advice?

# Phase 2: Stakeholder Interview Results

Evidence: Centralized data entry produces the highest quality results

Result: This is what we recommend as a best practice

Evidence: Training styles varied depending on the size of the department or college: regular agenda item in faculty meetings, one-on-one training, ad-hoc meetings, etcetera

Result: Data supports that we continue to offer training in multiple formats: web, video, PDF, phone calls

Evidence: Some units did not use data collected for anything other than regional accreditation

Result: We shared ways other faculty used results (e.g., template for other accrediting bodies, program improvement processes)



# Phase 3: Faculty Focus Groups

The Das & Gater findings revealed a need to better understand faculty engagement with assessment



Academic Assessment Committee developed these research questions:

How are UF faculty engaged in academic assessment processes at the University of Florida?

In what ways could this information lead to the modification and improvement of institutional assessment processes?

# Participants

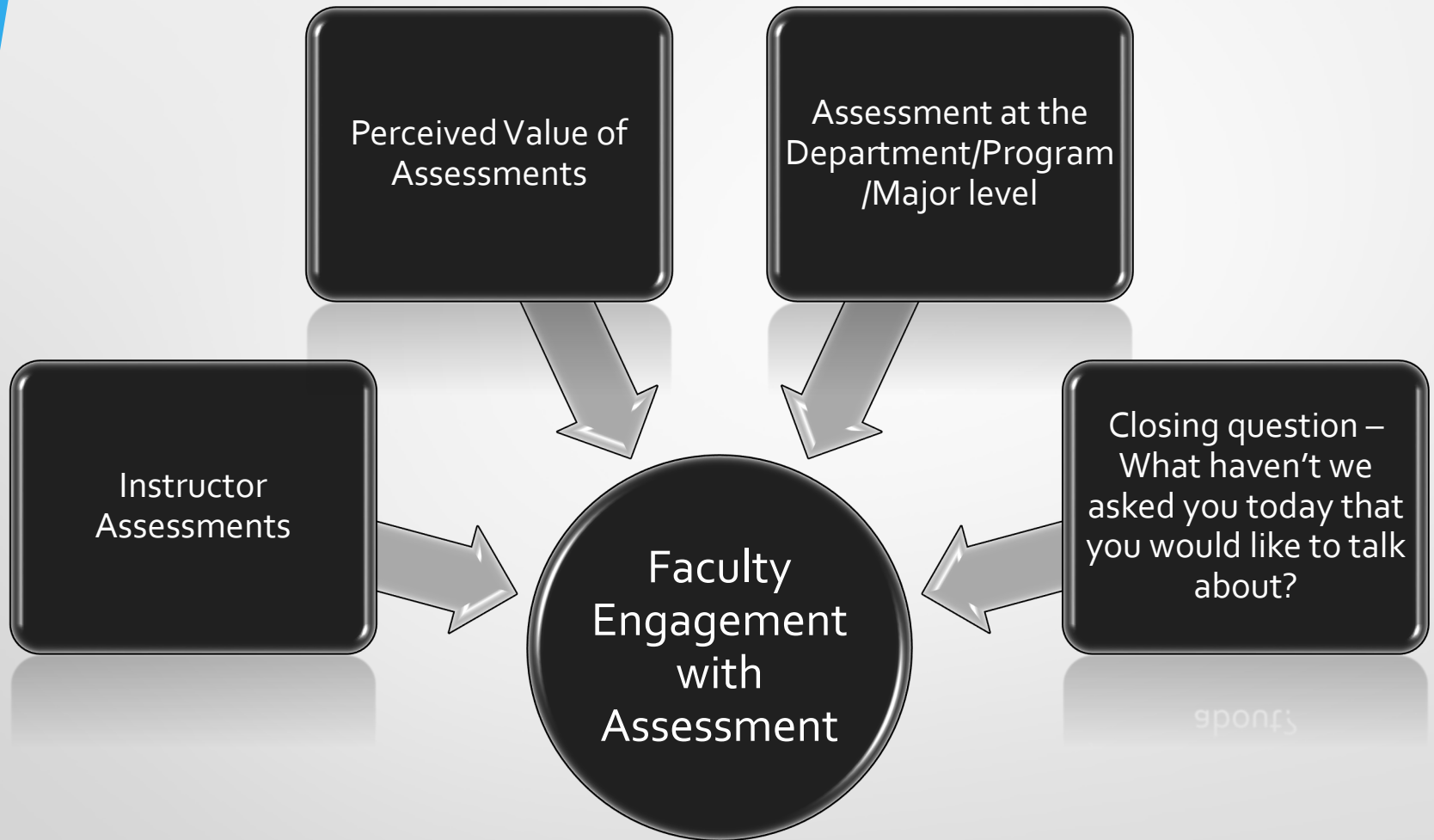
16 focus groups (one in each college), N = 146

Tenure and tenure-track faculty; all were invited to join groups

Delimitation:

Limited to faculty who were available at the scheduled times in each college

# Question Categories



# Results

34 sets of data – field notes, recordings


Loaded into NVivo11

Coded first for response categories

8 response categories and three themes emerged

# Response Categories

<b>Data Category</b>	<b>Description</b>
<b>Assessment methods and processes</b>	Various assessment types used for the assessment of student learning
<b>Challenges</b>	Issues that impede assessment or make it challenging
<b>Concerns</b>	Areas that cause concern or are barriers to assessment they would like to do
<b>Context</b>	Factors that influence assessment that faculty cannot control
<b>Data gaps</b>	Information that faculty would like to collect but cannot or do not
<b>Needs</b>	What faculty would like to have to facilitate their assessment processes
<b>Use of Results</b>	The ways that faculty use the results of their assessments
<b>Value</b>	What faculty value about assessment



# Theme 1: Assessment is Valued

# Faculty quotes

*"If you don't determine they're learning, why are we here?"*

*"There is value in seeing students succeed, and assessment provides information that is used to re-examine student knowledge."*

# Findings

The value of assessment is often directly associated with standards of the field

Use of results is consistent but purposes and methods vary

- Most prevalent: assessment data used to modify instruction to advance student learning
- Open dialogue is a primary assessment methodology for those who teach/mentor in one-to-one teaching situations

Faculty want to learn from their peers – sharing assessment methods and processes is valuable





# Theme 2: Influential Conditions

# Faculty quotes

*"The type of assessment I use depends on the size of the class."*

*"Our disciplinary accreditor requires a set of national exams that all of our students must take. Why can't we use these as outcome measures?"*

# Findings

Two conditions that impact assessment were common across the colleges:

Class size

Disciplinary accreditation

# Class Size

Primary driver for assessment methodology: number of students in the class

Large classes constrain assessment choices to large scale measures (such as exams scored electronically)

There is a tension between what faculty want to do to assess their students and what they feel they must do because of class size

# Disciplinary Accreditation

Disciplinary accreditors often require student learning measures and some prescribe student learning outcomes

Some disciplinary accreditors have established assessment standards

## Frustrations:

- Aligning disciplinary accreditation requirements with SACSCOC requirements
- Appropriate use of required third-party exams



# Theme 3: Misconceptions about SACSCOC Reporting

# Findings

We didn't ask, but...

Accreditation reporting was raised in nearly every college

Three misconceptions emerged:

- All student learning must be quantified
- Academic assessment is limited to specific categories and types
- The data "disappears"

# Misconception 1: All student learning must be quantified

*"Our faculty are very engaged in gathering anecdotal evidence, but push back with quantification of student learning information."*

*"Subjective data cannot be quantified."*

- Likely arises from a UF requirement to provide a rubric
- We ask for summary data; for some, this has been conflated with quantification of student learning data



## Misconception 2: Assessment is limited to specific categories and types

*“The criteria for SACSCOC are limited; I feel like my hands are tied.”*

- Florida regulations require certain categories of student learning outcomes
- The UF Graduate School also has established outcome categories
- However: additional categories are permitted


## Misconception 3: The data “disappears”

Faculty related concerns about not knowing what happens to the data they report

Data reporting is done in our accreditation module from a third party provider

Access is limited to those who have a “role” in the software program

This is a legitimate concern



# Cultivating Engagement: Actions taken based on our analysis

# Recommendations for Action

Finding	Recommendations
<b>Value</b> 1. <b>Share assessment work across colleges</b>	1. Continue the UF Assessment Conference, and develop an online mechanism for faculty to share their assessment work with others.
<b>Influential conditions</b> 1. <b>Class size</b>  2. <b>Disciplinary accreditation</b>	1. Develop faculty workshops in conjunction with the Office of Faculty Development and Teaching Excellence on using Canvas assessment tools to facilitate data collection for multiple assessment methods.  2. Work with specific disciplines to maximize use of student learning data collected for disciplinary accreditors for regional accreditation reports.

# Modifications based on our analysis

Finding	Recommendations
<p><b>Misconceptions</b></p> <ol style="list-style-type: none"><li><b>1. Quantification of student learning data</b></li><li><b>2. Limitations on assessment outcomes and measures.</b></li><li><b>3. Faculty are not clear on how the data they report is used at the institutional level, nor do they have ready access to it.</b></li></ol>	<ol style="list-style-type: none"><li>1. Develop online tools to clarify what can be reported.</li><li>2. Develop online tools to clarify assessment types.</li><li>3. Develop an accessible view of student learning data reports, perhaps through visualization.</li></ol>

# Continued research

- We have completed a study with our Lecturers
- Data is being analyzed now

## Timothy S. Brophy, Ph.D.

Professor and Director, Institutional Assessment

[tbrophy@aa.ufl.edu](mailto:tbrophy@aa.ufl.edu)

352-273-4476

Brophy, T. S. (2017). The University of Florida Assessment System. In D. Miller & T. Cumming, (Eds.), *Educational assessment in higher education: Theory and applications* (pp. 184-202). Sterling, VA: Stylus.