Introduction to Assessment of Learning

KSU’s Approach to Continuous Improvement
Assessment Team

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Workshop Outline

• Introductions and Overview
• Continuous Improvement Cycle
• Online System
• Resources
• Questions and Discussion
History and Purpose

• Launched in Fall 2016
• Purpose is simple: To improve KSU
• Emphasis on use of results for improvement
• Focus on areas with the most room for improvement
• Helps us better serve students and internal customers, fulfill our mission and vision, and live our values
What is Assessment?

Assessment answers the question, “How well are we doing what we intend to do?”

• Deciding what we want students to learn and making sure they learn it
• Determining the effectiveness of our academic/student services
• Telling our story: What makes our college/program unique? How effective are we in meeting student, industry, and societal needs?

Source: Suskie (2018)
Why do Assessment?

Assessment has three fundamental purposes (Suskie, 2018):
1. Ensuring and improving educational quality
2. Stewardship
3. Accountability

Why are you doing assessment?
*Extrinsic vs. Intrinsc* Motivation
KSU’s Assessment Guiding Principles

• Supports KSU’s mission and strategic priorities
• Beyond mere compliance or reporting
• Focused on incremental improvement
• Meaningful and manageable
• Collaborative at all stages
• Use of embedded, direct assessments
• Continuous, flexible, systematic, and equitable
• Learning outcomes align with employer needs and/or industry standards
Why Not Use Grades?

Grades or holistic scores:

• Can point to potential areas of concern, but they should not be used as direct measures of student learning
• Lack granular information about what students have and have not learned
• Make it difficult to determine specific and targeted strategies for improvement
• May include factors other than student learning (i.e., participation, attendance, effort, etc.)

Assessment goes beyond grading by systematically examining patterns of student learning across courses and programs and using this information to improve educational practices (Suskie, 2018).
Learning outcomes, instructional strategies, and assessments should align and support one another. Misalignment hinders student learning and motivation.

- **Learning Outcomes:** What do we want students to know or do when they complete this course/program?
- **Instruction:** What is the best way to teach the learning outcomes and prepare students for assessments?
- **Assessment:** What tasks or instruments will provide evidence of whether students have achieved the learning outcomes?

Measure → Change → Measure

Source: [https://ctl.wiley.com/course-design-triangle/](https://ctl.wiley.com/course-design-triangle/)
KSU’s Continuous Improvement Cycle

- Foundational Documents: Vision, Mission, Strategic Plan, Values
- Determine Outcomes
- Use Results for Improvement
- ASSESSMENT OF LEARNING
- Measure Effectiveness
- Provide Learning Opportunities
Determine Outcomes

• **Student Learning Outcomes**: Expected knowledge, skills, attitudes, or competencies that students are expected to acquire

• **Performance Outcomes**: Specific goals or expected results for an academic program (currently optional)

• Where is there the most room for improvement?
Specific, Strategic
Measurable, Motivating, Meaningful
Attainable, Action-Oriented, Aligned
Relevant, Result-Oriented, Realistic
Time-bound, Trackable
Student Learning Outcomes (SLOs)

- Educational programs
- 3 SLOs per program
- Knowledge/skill areas with a need for improvement
- Aligned with industry standards/needs
- Written in clear, succinct language
- Use of action verbs (Bloom’s Taxonomy)
Are learning outcomes observable and measurable?

Do learning outcomes align with the expected level of mastery for the course and for the degree program?

Graphic Source: Vanderbilt University Center for Teaching
Revised Bloom’s Taxonomy: Anderson et al. (2001)
### Are the learning outcomes measurable?

<table>
<thead>
<tr>
<th>Not Measurable</th>
<th>Measurable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will be familiar with...</td>
<td>Students will identify (or list) the...</td>
</tr>
<tr>
<td>Students will know the difference between...</td>
<td>Students will summarize the difference between...</td>
</tr>
<tr>
<td>Students will think critically about...</td>
<td>Students will evaluate the evidence...</td>
</tr>
<tr>
<td>Students will compare and contrast...</td>
<td>Students will construct an argument for...</td>
</tr>
<tr>
<td>Students will understand the principles of...</td>
<td>Students will apply the principles of...</td>
</tr>
<tr>
<td>Students will appreciate...</td>
<td>Students will articulate the importance of...</td>
</tr>
<tr>
<td>Students will learn how to...</td>
<td>Students will demonstrate...</td>
</tr>
</tbody>
</table>
SLO Examples

• Students will **demonstrate** effective oral communication skills.
• Program graduates will **define** and **interpret** methodological and statistical constructs.
• Students will to **explain** how key values and social practices associated with American life have evolved in distinct historical periods.
Determine Outcomes: Guiding Questions

• What do we want students to get out of this learning experience? What do we want them to be able to do long after the course is completed? Why are those things important?
• What do our students do after they graduate? What are the most important things they need for success in those pursuits?
• What do we value most about our discipline? According to the major authorities in our discipline, what are the most important things students should learn?
• How does this course relate to other courses in this program, to other disciplines that students may be studying, or to the general education curriculum?
• What specific learning activities will help students achieve the learning outcomes?
• How will we know if students have achieved the learning outcomes?
• What assessments will best provide evidence of outcome achievement?

Source: Suskie (2018)
Pitfalls in Identifying SLOs

- Failing to involve faculty
- Identifying too many SLOs for improvement
- Focusing on multiple knowledge/skill areas within one outcome
- Writing SLOs in vague terms
- Failing to define *observable* behaviors
Performance Outcomes (POs)

• An area of program performance with a need for improvement
• Currently POs are **optional** for educational programs
Performance Outcome Examples: Educational Programs (optional)

• Increase retention, progression, and/or graduation rates
• Decrease time-to-completion
• Reduce bottlenecks in course scheduling; increase course sections
• Increase high impact practices
• Increase online/hybrid offerings
• Increase use of OERs (open educational resources)
• Improve student satisfaction or course evaluation scores
• Increase research productivity or external grants
• Increase employment or graduate school acceptance prior to KSU graduation
• Increase certification/licensing exam pass rate
• Increase community engagement of faculty/students
Pitfalls in Identifying POs

- Failing to involve staff and/or faculty
- Focusing on “easy” outcomes just to comply with a requirement
- Not using improvement language
- Focusing on one-time projects that are not measured over time
- Listing strategies for improvement instead of an outcome or measure
Provide Learning Opportunities or Services
Measure Effectiveness

• Specific method used to collect evidence of the outcome
• At least two measures per outcome, at least one direct measures
• Individual items on an assessment instrument may be used as separate measures; helps guide specific strategies for improvement
• The same instrument may be used to assess different outcomes
  ✓ Rubric items (direct)
  ✓ Exam items (direct)
  ✓ Internship evaluation items (direct)
  ✓ Self-assessment (indirect)
  ✓ Survey items (indirect)
  ✓ Focus group questions (indirect)
Measures of SLOs

Direct Measures:
- **Must have at least one**
- Tangible, visible, and compelling evidence of what students have learned
- Usually assessed by instructor or individuals with content expertise/knowledge

Indirect Measures:
- Signs or perceptions of student learning
- Self-assessments or surveys
Example SLO Measures

DIRECT MEASURES OF STUDENT LEARNING (at least one per outcome; two are preferred):

Exam item • Assignment, project, or presentation rubric item • Licensure/professional exam item • Portfolio assessed with a rubric • Pre/post-test item • Thesis/dissertation defense rubric • Comprehensive exam item • Standardized test item • Internship supervisor evaluation • Employer rating of student skills

INDIRECT MEASURE OF STUDENT LEARNING (may supplement direct measures):

Student self-assessment of skills using a rubric or self-evaluation form
Measures of POs (optional)

• Direct Measures: Tangible, visible, and compelling evidence of the outcome
• Indirect Measures: Signs or perceptions of the outcome
• Quantitative: Numerical data
• Qualitative: Lists, themes, or descriptive analyses
Measure Effectiveness: Guiding Questions

- Are the measures appropriate for the outcomes?
- Do we have two measures for each outcome?
- Do we have at least one *direct* measure of student learning for each outcome?
- Are the measures sufficiently granular to collect specific evidence of student learning or unit performance (i.e., exam or rubric items as opposed to holistic scores or percentages)?
- How will the assessment data be analyzed?
- What, if any, challenges might arise during data collection?
Pitfalls in Measuring Effectiveness

• Failing to involve faculty and staff
• Failing to use existing measures
• Using measures that are too holistic (i.e., course grades as measures of SLOs)
• Attempting to measure too many things
• Failing to collect the data, or creating unmanageable data collection processes
• Setting arbitrary targets (targets are optional)
Use Results for Improvement

Analyze and summarize the data
- Means and frequency distributions
- Graphs to visualize results and illustrate trends

Identify trends and strategies for improvement related to the outcome
Measure → Change → Measure
Use Results for Improvement

Identify trends and strategies for improvement related to the outcome

✓ Required every 3 years; option to add the template annually if desired
✓ Create an implementation plan for strategies

Discuss results and strategies for improvement with supervisor and faculty/staff
Improvement Planning: Guiding Questions

Share results and discuss with faculty team:
What are the big take-aways from the results? Where are students struggling the most?
What factors are contributing to the results?
  • Perform a root cause analysis (the 5 whys; fishbone diagram)
What is the overall strategy for improvement?
  • What are the specific action steps needed to implement the strategy?
  • What are the timeframes for each action step?
  • Who else needs to be involved? What resources do we need?
Should the assessment plan/process be modified?
  • Are the learning outcomes appropriate?
  • Are the measures effective? Do they demonstrate acceptable reliability and validity?
  • How can our data collection process be improved?
Possible Interventions

Changes in curriculum, such as:
- Curriculum map
- Prerequisites
- Assignments
- Sequencing
- Amount of time devoted to concept
- Addition of concepts or practice opportunities
- Assessment instruments

If a change does not lead to improvement, it’s okay -- try something else
Resources for Improving Instructional Strategies

MERLOT - Resource Collection

U of IL - Teaching & Learning Resources

Vanderbilt U - Center for Teaching Guides

NEA - Higher Education Best Practices - Teaching & Learning

U of Leicester - Effective Teaching Strategies

The Chronicle of Higher Ed - Here’s How to Make Your Teaching More Inclusive

Faculty Focus - Higher Ed Teaching Strategies
Pitfalls in Using Results for Improvement

- Over-complicating the analyses or written report
- Failing to involve others
- Failing to implement identified strategies for improvement
- Implementing too many strategies
- Failing to improve upon an ineffective assessment process
Review/Modify the Assessment Plan

• Ensure Outcomes are still meaningful and a priority for improvement
• Review and modify Measures as needed (upload in the Measures field)
• Eventually use the same Outcomes and Measures in order to see improvement over time
• Improve the process of collecting data if needed
Example Timeline

- **Fall 2020**
  - Submit Assessment Plan

- **August 2020 - June 2021**
  - Collect data

- **July 2021 – September 30, 2021**
  - Analyze data

- **September 30, 2021**
  - Submit Improvement Report
Cohort Schedule and Lists

**IMPROVE KSU**
College Cohort Schedule

The grid below depicts the annual continuous improvement reporting requirements for each College Cohort (see list on the next page).

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Due Fall 2018</th>
<th>Due Fall 2019</th>
<th>Due Fall 2020</th>
<th>Due Fall 2021</th>
<th>Due Fall 2022</th>
<th>Due Fall 2023</th>
<th>Due Fall 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Results from Previous Year</td>
<td>Results from Previous Year</td>
<td>Interpretations and Trends / Strategy for Improvement</td>
<td>Results from Previous Year</td>
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*College Cohorts A-F pertain to educational programs without a specialized accreditation self-study exemption. Approved centers and service units aligned with College A are also included in the cohort, but they do not participate in CR. (see below)

- **Annual reporting of Results**
- **Interpretation and Trends / Strategies for Improvement**
- Every 3 years (if not added, it is not required)
**Improve KSU: Continuous Improvement Process Map for Educational Programs**

1. **START HERE:** Identify Student Learning Outcomes (SLOs)

2. Institute an up-to-date curriculum map that reflects program and course-level data.

3. Through consultation with faculty, identify SLOs with a need for improvement.

4. Identify courses and learning activities that align with the SLOs with a need for improvement.

5. For each learning activity, identify measures of student learning (i.e., exams, midterms, rubric, exam, informal assessment, self-assessment, etc.).

6. **Submit ASSESSMENT PLAN** in the online system (improve.kennesaw.edu)
   - Minimum of 2-5 SLOs, at least one direct measure per SLO

7. **Provide learning activities**
   - Assess student learning using the identified measures.
   - Analyze data: Summarize and interpret results; identify trends, if applicable.
   - Share results with faculty: Every 3 years, identify implications and strategies for improvement.

8. **Submit IMPROVEMENT REPORT** in the online system (improve.kennesaw.edu)
   - Due September 30th of the following academic year.

9. Update ASSESSMENT PLAN for the next academic year (improve.kennesaw.edu)

The Improve KSU website provides additional resources (http://improve.kennesaw.edu/).

Please contact the Office of Institutional Effectiveness or assessment@kennesaw.edu if you have any questions or would like to schedule an individual or team consultation.

Thank you for your commitment to continuous improvement at KSU!
Improve KSU: Continuous Improvement Process Map for Administrative, Operational, and Student Affairs Units

START HERE: Identify Performance Outcomes (POs)

1. Through consultation with team members, identify POs with a need for improvement.

2. For each PO, identify measures of performance (i.e., metrics, survey items, business process metrics, etc.).

Provide services

Assess performance using the identified measures.

Analyse data, summarise and interpret results.

Share results with team members. Every 3 years, identify interventions and trends/strategies for improvement.

Submit IMPROVEMENT REPORT to the online system (improve.ksu.edu).

Due September 20th of the following academic year.

Update ASSESSMENT PLAN for the next academic year (improve.ksu.edu).

The Improve KSU website provides additional resources (http://www.ksu.edu/improve).

Please contact the Office of Institutional Effectiveness at disaccom@ksu.edu if you have any questions or you would like to schedule an individual or team consultation.

Thank you for your commitment to continuous improvement at KSU.
Online System

- Link to Online System: improve.kennesaw.edu
- Feedback on Assessment Plan and Improvement Report
- Templates
- Report Uploads (with approval only)
- Downloading a PDF of the plan/report
Other Uses of Assessment Data

- Inform the development of university strategic plan through common themes
- Measure progress for university and unit strategic plans
- University and specialized accreditation/reaffirmation
- Academic Program Review
- Other assessment initiatives
Culture of Continuous Improvement

- Begin with a core set of institutional values
- Communicate expectations and model the process
- Involve all facets of the university
- Utilize and build on existing tools and programs
- Identify and communicate common ties among initiatives
- Communicate how assessment results have been used for improvement
- Keep continuous improvement “top of mind” and part of the institutional lexicon
- Enhance data/information literacy skills among faculty and staff
- Encourage academic innovation -- test novel or innovative solutions
- Integrate with HR systems: job descriptions, performance reviews, recognition and reward systems
KSU Resources

Improve KSU Website
• Online system guide
• Resource documents
• Cohort Schedule and Lists

Written Qualitative Feedback
• Assessment Plan Feedback
• Improvement Report Feedback

Individual and Team Consultations
Drop-In Help Sessions
Workshops
Helpful Links

Online system: [http://improve.kennesaw.edu/](http://improve.kennesaw.edu/)

Improve KSU Website: [https://cia.kennesaw.edu/assessment/improve-ksu.php](https://cia.kennesaw.edu/assessment/improve-ksu.php)

A Simple Model for Learning Improvement: Weigh Pig, Feed Pig, Weigh Pig

Association of American Colleges & Universities (AAC&U) VALUE Rubrics
[http://www.aacu.org/value-rubrics](http://www.aacu.org/value-rubrics)
Additional Resources


Thank you for attending!

Assessment Team Email: assessment@kennesaw.edu