OIR’s Role in Addressing Student Learning Outcomes at NOVA

Office of Institutional Research, Planning, and Assessment
Cross-Campus Day
January 7, 2009
OIR Area of Focus: Data/Data Analysis

• OIR is the official source of NOVA’s institutional data and is responsible for ensuring data integrity.

• OIR provides data and data analysis to the college president, senior administrators, committees, and the college community in general.

• OIR regularly publishes information on various sectors of the college, posting these publications on this website.

• OIR is responsible for reporting requirements at the federal and state levels.
OIR Area of Focus: Research Studies

• OIR conducts research studies and publishes its findings in the form of research reports, research briefs, data reports, and fact sheets.

• Research study topics include a wide area of subjects, such as student performance, developmental studies, enrollment patterns.

• OIR periodically conducts external environmental scanning that focuses on the local demographic changes, labor market trends, and local business needs.
OIR Area of Focus: Research Support

• OIR provides research support to the faculty and staff and, in some instances, to students.

  • Research support takes many forms including developing survey instruments using statistical techniques in research, helping to analyze data, and conducting various types of evaluations.

  • OIR also provides support with writing grant proposals, statistical analysis, tracking student performance, and conducting doctoral studies.
OIR Area of Focus: Special Initiatives

- At the request of the college president and the administrative council, OIR conducts special studies on an ongoing basis.

  - These studies include areas, such as changing enrollment patterns, evaluating major areas of college services, and doing needs assessments before policy decisions are made at the college.

- In addition, OIR takes a leadership role in major college initiatives, such as Achieving the Dream (ATD) and the Community College Survey of Student Engagement (CCSSE).
OIR Area of Focus: Enrollment Planning

OIR oversees various aspects of enrollment planning:

• maintaining the official enrollment data for the college,
• monitoring enrollment trends, and
• providing campus enrollment targets for planning purposes.
Office of College Planning

The purpose of the Office of College Planning is:

• to provide college-wide leadership and coordination for planning and institutional effectiveness,

• to facilitate the usefulness of information for decision making and organizational development, and

• to provide responsive support and consultation for accreditation-related self-study.
Office of Academic Assessment and Student Learning Outcomes
Outcome-Based Evaluation of Institutional Effectiveness at NOVA

Focus on Outcomes:
- Student Learning Outcomes
- Program Outcomes
- College-Level Competencies
- Efficiency/Effectiveness
- Quality Customer/(Student) Services
Reasons to assess student learning

• Assessment processes help to ensure that:
  • Institutional and program-level goals are clear to the public, students, faculty, and staff.
  • Institutional programs and resources are organized and coordinated to achieve institutional and program-level goals.
  • The institution is indeed achieving its mission and goals.
  • The institution is using assessment results to improve student learning and otherwise advance the institution.
  • It is required by SACS, VCCS, and SCHEV.
SACS Expectations and Recommendation

Expectations

2.5 - Institutional Effectiveness (CR)
3.3.1 - Institutional Effectiveness (CS)
3.5.1 - General Education Goals (CS)

(College Level Competencies)

SACS Recommendation (2002)
Section III (Institutional Effectiveness)

“The Committee recommends that the College establish a systematic evaluation process which assures that both college and unit-level institutional effective measures are outcome-based and documented college wide.”
Current Processes

- Annual cycle – Annual Planning and Evaluation Reports
  - Instructional programs (degree-awarding)
  - Administrative units (units headed by Vice Presidents, Sub-units headed by Directors)
  - Campuses (headed by provost, functional areas headed by Provosts’ staffs)

- Program/Discipline evaluation
  - Programs – seven-year cycle
  - Disciplines – ten-year cycle

- Annual planning and evaluation cycle aligned to the fiscal/academic year (mid-year evaluation in December)
Emphasis on Student Learning Outcomes in Instructional Programs

- Focus on NOVA’s degree-awarding programs and selected career studies certificates

- Effective student learning
  - Programs define what students are expected to learn
  - Programs designate the means of measurement
  - To close the feedback loop, programs incorporate assessment data and thereby demonstrate continuous improvement
Instructional Programs to Assess Student Learning Outcomes

Programs that will define, assess, and report on student learning outcomes:

1. All degree-awarding instructional programs

2. Career studies certificates not connected to degree-awarding instructional programs
What is assessment?

Assessment is the ongoing process of:

• Establishing clear, measurable expected outcomes of student learning.

• Ensuring that students have sufficient opportunities to achieve those outcomes.

• Systematically gathering, analyzing, and interpreting evidence to determine how well student learning matches our expectations.

• Using the resulting information to understand and improve student learning.

(Source: Assessing Student Learning, Linda Suskie, 2004)
What are student learning outcomes?

• Student learning outcomes are the knowledge, skills, attitudes, and values that students gain from a learning experience.

• Student learning outcomes define what students know, are able to do, and value by the end of a learning experience.
Course-Level Example

Course: ACC 241 - AUDITING I

Student Learning Outcome: Set up procedures required to examine the records of an ongoing concern appropriate for auditing all of the various significant assets, liabilities, stockholders’ equities, revenue, and expense accounts.

Method of Assessment: project, with points based on checklist for each of the following categories (assets, liabilities, stockholders’ equities, revenue, and expense accounts)
Course-Level Example

Course: AIR 121 Principles of Refrigeration I

Student Learning Outcome: Demonstrate understanding of the basic refrigeration cycle

Method of Assessment: Ten-minute quiz with multiple-choice questions on basic refrigeration cycle.
Course-Level Example

Course: BUS 200 - PRINCIPLES OF MANAGEMENT

Student Learning Outcome: Identify and integrate methods of organizational structure and the related topics of division of labor, authority/responsibility, span of control, centralization/decentralization, delegation, organizational change, staffing, and diversity within the workforce.

Method of Assessment: Graded practical exercise “Who Goes Abroad Management Team Decision” (20 points, covering topics of organizational structure).
Course-Level Example

Course: CHM 111 COLLEGE CHEMISTRY I

Student Learning Outcome: Name and write formulas for inorganic compounds.

Method of Assessment: Laboratory Experiment - Inorganic Nomenclature (40 points)
Course-Level Example

Course: **ECO 202 - PRINCIPLES OF MICROECONOMICS**

Student Learning Outcome: Use conceptual tools and analysis to interpret the measures and objectives of households and firms

Method of Assessment: Summary and Analysis **Paper** (3-4 pages double spaced)
Course-Level Example

Course: REA 100 - PRINCIPLES OF REAL ESTATE

Student Learning Outcome: Analyze and discuss the ever-increasing mobility of our population and how this affects the use and value of land resources

Method of Assessment: Embedded test questions (short answers)
Classroom Assessment Techniques

• The primary goal is to better understand your students' learning and so to improve your teaching.

• The approach is that the more you know about what and how students are learning, the better you can plan learning activities to structure your teaching.

• The techniques are mostly simple, non-graded, anonymous, in-class activities that give both you and your students useful feedback on the teaching-learning process.

Classroom Assessment Techniques

• Choose a Classroom Assessment Technique (CAT) that provides this feedback, is consistent with your teaching style, and can be easily implemented in your class.

• Examples
  • Minute paper
  • Muddiest point
  • One-sentence summary
  • Directed paraphrasing
  • Student-generated test questions
Classroom Assessment Techniques

Benefits

• Provides short-term feedback about the day-to-day learning and teaching process at a time when it is still possible to make mid-course corrections.

• Provides useful information about student learning with a much lower investment of time compared to tests, papers, and other traditional means of learning assessment.

• Helps to foster good rapport with students and increase the efficacy of teaching and learning.

• Encourages the view that teaching is a formative process that evolves over time with feedback.
Steps to Assess Student Learning Outcomes

1. Identify student learning outcomes for your program

   • Student learning outcomes should be SMART:
     • Specific
     • Measurable
     • Attainable
     • Results-oriented
     • Time-bound
Steps to Assess Student Learning Outcomes

2. Demonstrate Institutional Effectiveness through a Program Mapping Process

- Each program completes a map of program-specific student learning outcomes to show how these learning objectives are met.
  
  - Curriculum mapping process demonstrates
    - the program’s student learning outcomes
    - the courses in which these outcomes are met
    - the extent to which each outcome is achieved
Steps to Assess Student Learning Outcomes

1. Identify student learning outcomes for your program
2. Determine practices used to achieve outcomes through curriculum mapping
3. Determine methods of assessment
4. Gather evidence
5. “Close the loop”
   - Review and interpret results
   - Recommend actions
   - Make changes
   - Measure effectiveness of changes
Some (Mis)Perceptions about Assessment and Responses

1. We’re doing just fine without it. (Assessment is medicine only for the sick.)
   Okay, then let’s use assessment to find out what works, and to help us document and build on our successes.

2. We’re already doing it. (Assessment is just old wine in new bottles.)
   Okay, then let’s audit all the assessments we already do to discover what we know and what we don’t.

3. We’re far too busy to do it. (Assessment is an “administrivial” burden.)
   Okay, but since we’re already doing it, let’s use assessment to see where and how we can save time and effort.
Some (Mis)Perceptions about Assessment and Responses

4. The most important things we do can’t/shouldn’t be measured. (Assessment is too reductive and quantitative.)
   And not everything measurable should be measured, but let’s see if we can agree on how we can tell when we’re succeeding in these most important things.

5. We’d need more staff and lots more money to do assessment. (Assessment is too complex and expensive.)
   Since we’re unlikely to get more resources, how, what, and where can we piggyback, embed, and substitute?

Adapted from T. A. Angelo—DePaul University School for New Learning, June 2001, “Closing the Loop”
What assessment at NOVA is NOT about:

- Evaluating individual faculty and students
- Reducing faculty academic freedom
- Top-down processes

What assessment at NOVA IS about:

- Fostering a culture of continual improvement
- Evidence-based decision making
- Faculty involvement
- Developing an accurate picture of NOVA students’ knowledge, abilities, attitudes and values as relates to program student learning outcomes.
Assisting Teaching Faculty on Student Learning Outcomes

Workshops in Spring 2009 will include:

- Laying foundation for assessing student learning outcomes
  - General information workshop
  - Writing student learning outcomes
  - Teaching the techniques of mapping
- Techniques for measuring student learning outcomes
  - Classroom Assessment Techniques
  - Developing grading rubrics
  - Embedding testing items
- Closing the Loop
  - Communicating results to faculty
  - Using results to enhance teaching
  - Using results in program reviews
# Three-Year Assessment Plan

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<td>Identify SLOs</td>
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Questions about student learning outcomes assessment?

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