We’re in This Together: How facilitated peer feedback leads to continuous improvement

Drexel University, Academic Assessment Conference September 2018

Katherine Cermak, PhD
Associate Dean
Planning & Assessment

CDR Lon Olson, PhD
Leadership, Ethics, & Law
Permanent Military Professor
Session Goals

Presenters will share

★ USNA annual assessment report feedback process designed to
  ○ set expectations for departments/programs
  ○ increase faculty/committee member assessment knowledge and confidence
  ○ model best practices (rubric norming)
  ○ result in faculty-led conversations, formative feedback, and improved programs

★ USNA assessment rubric that we use to facilitate this process
Participant Outcomes

Participants will consider ways to

- adapt aspects of the USNA peer review process to improve faculty/committee member confidence and understanding of good assessment practices at their home institutions.
- leverage existing structures and resources at their home institutions to further a culture of assessment.
Opinion

The Misguided Drive to Measure ‘Learning Outcomes’

By Molly Worthen

Feb. 23, 2018

Some Questions for Assessophiles

Alex Small takes issue with some of the approaches and aims of the assessment movement.

By Alex Small // July 3, 2018

#Views #Assessment And Accountability #Opinion
A Defense of a Collaborative Approach to Assessment

If we as faculty members truly want to own the assessment of student performance and understanding, then we should work together toward meaningful solutions and processes, writes Will Miller.

The Case for Assessment

"Assessment" has become a dirty word in higher education, but it’s much needed.
United States Naval Academy
(Background, challenges, constraints, and resources)

★ Undergraduate college of the United States Navy and Marine Corps
★ ~4500 midshipmen (students)
  ○ Hail from every congressional district and U.S. Territory
  ○ Degree completion required in 47 months by Act of Congress
United States Naval Academy
(Background, challenges, constraints, and resources)

★ 5 Divisions, 20 Academic Departments, 25 majors
★ General education (core) of ~80 of ~140 total credits
★ Typically 18 credit hours a semester
★ Bachelor of Science Degrees (English to Engineering)
United States Naval Academy
(Background, challenges, constraints, and resources)

★ Faculty
○ ~580 faculty members
○ approximately ½ civilian and ½ military officers
★ Typically one administrative/clerical staff member per department
Shared Governance

- Assessment is required and guided by an AcDean Instruction (Policy)
- Assessment is supported by an Associate Dean for the Academy
- Assessment schedule is maintained and facilitated by the Faculty Senate Assessment Committee
  - 9 members academic and professional faculty and 3 ex officio
What are your assessment challenges? Strengths?

Dedicated Finances
- No Budget/No Release
- Flush

Staffing of Assessment Activities
- Service
- Multiple FTE

Faculty Ownership of Assessments
- To Us
- By Us

Local Knowledge/Expertise in Departments
- Novice
- Expert
Goal: Increase faculty knowledge of and comfort with assessment of student learning and encourage departments to use information for improvement.

Approach:
- Assessment Report Rubric
- Rubric Norming
- Guided Peer Feedback
Process

★ Goal: Shared rubric (FSAC input--got FSAC buy-in from the beginning--needed to set expectations for the committee and the departments)
- Shared rubric (Disseminated To Committee/To Departments)
- Rubric Norming // Pre Meeting
- Peer feedback—2-4 per report
- No ranking of departments
- In person
- Follow-Up
Rubric

★ Student Learning Outcomes
○ Student Centered // Appropriate Level of Thinking // Coverage Learning expected in the Curriculum
★ Assessment is an On-Going Process
○ On-Going (vice sporadic) // Results in Action
★ Outcomes Align with Curriculum and Institutional Outcomes
○ Department Curriculum Map // USNA Graduate Attributes
★ Methodology
○ Direct Assessments // Appropriate Sampling // Collaborative Effort
★ Performance
○ Target Level for Expectations
Learning Outcomes:

Student Centered

- **Fully Met**: LOs are student centered statements of what students will know or be able to do.
- **Developing**: LOs are not student centered, instead indicating what the department or instructors will do.

Level of Thinking

- **Fully Met**: LOs culminate in the highest (appropriate) levels of thinking (Bloom’s)
- **Developing**: LOs primarily focus on what students will know or understand, not on how they will use that knowledge or understanding.
Practice

Learning Outcomes for Chemistry Major

By completion of the degree majors will be able to:

1. Explain natural phenomena and solve problems involving chemical processes using the principles of atomic/molecular structure and reactivity, thermodynamics and kinetics.

2. Answer scientific questions by employing technical literature, conducting experiments, analyzing and critically interpreting the results obtained, and applying these techniques to the design of new experiments.

3. Communicate effectively using oral, graphical and written expression with a variety of audiences.

4. Practice and justify the professional and ethical standards of chemists.

5. Operate as independent learners capable of self-directed intellectual growth.

6. Describe the relevance of chemistry to the Navy and current/historical world events.
Practice

Methodology

Direct Assessment

- **Exemplary**: Multiple assessments appropriate for each learning outcome being measured.
- **Fully Met**: Direct assessment in which student work has been selected that is appropriate for each learning outcome being measured.
- **Developing**: Only indirect assessments.

Collaborative Effort

- **Exemplary**: Evaluation and analysis of student work is shared by multiple faculty members and, when appropriate, procedures for improving rater agreement (inter rater reliability) are indicated.
- **Fully Met**: Evaluation and analysis of student work is shared by multiple faculty members.
- **Developing**: Assessment of student work or other assessment materials takes place in isolation and/or analysis of results is primarily handled by a single individual.
Major Outcome: Practice and justify the professional and ethical standards of chemists.

Course Outcome: Communicate laboratory results effectively, including spreadsheets, graphs, memos, and formal reports.

Integrated Laboratory III: Student ability to properly cite references in laboratory submissions (pre-labs and reports).

Instrument:
The ability of students to cite references properly was examined in 4 different laboratory submissions collected for the entire population of the course.

Results Collected and Analyzed By: Prof. X.
Collection

- **Fully Met**: Student work is an appropriately collected sample (simple random or systematic), a population, or otherwise suitably selected to ensure that results are representative and the amount of work is feasible for the assessment committee.
- **Developing**: Assessment materials do not include student work and/or are gathered on a volunteer or an ad hoc basis. The collected materials are either too little or too much.

Performance

- **Exemplary**: Target level or performance expectations are indicated for students at various points within the program reflectiving expected development.
- **Fully Met**: Target level or performance expectations are indicated for assessment and appear appropriate.
- **Developing**: Criteria for different levels of performance have been indicated, but expectations are not clearly identified or are inappropriate.
Results and Analysis:
At the start of the semester, students were given instructions based on the ACS Style Guide and provided with examples.

N=38--population. 5 students (13%) correctly referenced their sources every time (100% of correct citations) and 2 students (5%) never referenced their sources correctly. Half of the time or more 79% of students correctly cited their sources.

Target levels of achievement: 100% of students to consistently display this skill as proper citation format is a professional standard.
Assessment is an ongoing process

Assessment Action

- **Exemplary**: As appropriate, action(s) have been taken, based on the findings from past assessments. The effect of those actions on student learning and outcome achievement have been assessed and evaluated (collection, evaluation, action, and evaluation of action).

- **Fully Met**: As appropriate, action(s) have been taken on the findings completing an assessment cycle (collection, evaluation, and action).

- **Developing**: Assessment takes place, but there is no documentation that results are used to inform departmental discussions or decisions about curriculum, teaching strategies or student learning.
Practice:

Lessons Learned/Actions Suggested Based on Assessment:
The majority of students in the chemistry major are capable of citing references correctly in many instances but consistency in this practice is lacking. Citations are a part of the integrated laboratory curriculum from the beginning of the 4-semester sequence. Faculty teaching the first integrated laboratory will be encouraged to emphasize this skill from the beginning of the semester so that students become accustomed to the expectations. The department may wish to work closely with our new science librarian on methods of improving the ability of students to cite references correctly.
★ Faculty Senate Assessment Committee

● Increased knowledge of basics of assessment, expectations, and good practices
  ■ Understand that there is no 1 right way
  ■ See that departments are more similar than different.
  ■ Learn about and from each other
  ■ Believe that the process really is improvement

★ Department/Programs

● More transparent process
  ■ Feels safe
● Appreciate how carefully their peers read and think about the reports
Wrap Up and Questions

• Faculty-led process works well at USNA given budgetary and personnel restraints.
  – Avoids “us vs. them” dynamic.
  – Highly effective peer to peer conversations
  – Members of assessment committee bring expertise back to their departments.
• However an institution chooses structures its assessment process, some form of faculty ownership should be at the heart of it.
Questions

Contact Information:
Dean Cermak cermak@usna.edu
CDR Olson lolson@usna.edu