



Closing the Loop:

Using Assessment to Improve Student Learning

2014-2015 Highlights



Chemistry, B.A., Chemistry, B.S., Biochemistry, B.A., & Biochemistry, B.S.

Outcome(s) Assessed

- Understand fundamental principles and applications in analytical, biological, organic, inorganic, and physical chemistry
- Demonstrate an ability to apply modern methods of analysis to chemical systems in a laboratory setting including experimental design, use of technologies and instrumentation, and good laboratory practice
- Effectively and efficiently communicate scientific information including experimental results and analysis in both written and oral formats
- Exhibit problem solving and critical thinking skills

Methods & Artifacts

- Exam questions throughout the curriculum
- Sample lab reports
- Senior exit questionnaire
- Alumni questionnaire

Data-Informed Action Plan

- **Low scores in the General Chemistry I post-test**
 - Changed the questions and format to gather more detailed information about causes of student difficulty
- **Difficulties with quantitative analysis**
 - Added a focus on this topic in future classes
- **Some concerns about preparation for the workforce**
 - Considered the addition of more oral presentations in upper level courses
 - Added focus on undergraduate research

Criminology, B.A.

Outcome(s) Assessed

- **SLO 1:** Explain the social causes and consequences of crime
- **SLO 2:** Understand the operation of the U.S. criminal justice system
- **SLO 3:** Have a basic familiarity with the research methods used by criminologists
- **SLO 4:** Develop critical thinking skills
- **SLO 5:** Develop and use communication skills
- **SLO 6:** Students should be exposed to career preparation activities

Methods & Artifacts

- A non-graded **Pre-test** and **post-test** were administered to two sections of CRIM 2022 and CRIM 4575, respectively

Data-Informed Action Plan

- **Post-test scores were lower than the pre-test scores for questions relating to SLO 3**
 - Added additional focus on Universal Crime Reporting in coursework
- **Students have expressed an interest in learning more applied skills**
 - Investigating the creation of a criminal justice applied emphasis
 - Developing coursework that involves report writing for criminal justice, criminal law and procedure, and criminal investigation

Public Relations, B.A.

Outcome(s) Assessed

Students will understand the theoretical, strategic, and practical aspects of practicing in the field of public relations

- History and theory
- Research methods
- Culture
- Ethics
- Skills

Methods & Artifacts

- COMMPR 1811 **Quizzes**
- COMMPR 4855 **written campaigns**
- COMMPR 4811 **quizzes, essays, and portfolio**
- **External review report**

Data-Informed Action Plan

- **Student need for more flexibility in courses**
 - Created new Special Topics courses in Special Events Planning and Sports Public Relations
 - Will develop assessment measures for these new courses
- **Shortcomings in the ability to articulate strategic perspective taking**
 - Added a focus on higher-order thinking to coursework



Closing the Loop:

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2014-2015 Highlights



Science Education, B.A.

Outcome(s) Assessed

Nature of Science & Process Skills:

- Observing, predicting, measuring, communicating, identifying, and controlling variables and interpreting data
- Asking questions and collaborating with peers to obtain evidence from which to draw conclusions

Science as Inquiry:

- Developing a question, designing an investigation, gathering evidence, and communicating the analysis of their data

Conceptual understanding:

- Understanding the basic ideas in life, physical, and earth and space science by applying the concepts they have constructed

Methods & Artifacts

- **Final projects** in Inquiry into Life Sciences, Inquiry into Physical Sciences, and Inquiry into Earth and Space Science courses
- **Unit exams** in Inquiry courses

Data-Informed Action Plan

- **High variability in Inquiry unit exam scores**
 - Created a standard curriculum to be used across all sections to increase support for faculty and consistency for students
- **Need to further assess student process and questioning skills**
 - Implemented a final project for students in all Inquiry courses to formally assess this area
 - Considering administration of a pre-test and post-test in the future

Physical Education - Teaching, B.A.

Outcome(s) Assessed

- Be knowledgeable about concepts and principles relating to Human Movement
- Be able to perform a variety of movement skills
- Understand students and the process of learning
- Demonstrate the ability to teach effectively to both groups and individuals
- Understand responsibilities and opportunities in order to continue to develop as teachers and leaders throughout their careers

Methods & Artifacts

- **Student Teaching Evaluation**
- **Physical Fitness tests**

Data-Informed Action Plan

- **Additional focus on professional competencies needed**
 - Added PEMES 2030: Teaching Physical Education for Learning, with a focus on the basic foundations of the profession, student outcome assessments and portfolios, and professional associations and journals
- **Added technology instruction required**
 - Added a technology course to the major
 - Considering the possibility for majors to substitute the Technology course within the professional education sequence

Business, B.A. (Common Core)

Outcome(s) Assessed

- Students are expected to have acquired cutting-edge business knowledge
- Students will display exceptional contemporary professional skills
- Students will understand the role of strong work values in contemporary organizations

Methods & Artifacts

- **ETS Major Field Test**
- **Skyfactor Senior Exit Survey**

Data-Informed Action Plan

- **Students reported that the UNI Business program needs work in teaching data-driven decision-making**
 - Introduced a new Big Data course, which will increase the amount of data analysis in student coursework
- **Additional writing instruction and revising coaching improves student performance**
 - Continued support of faculty writing coach
 - Gathered focus group of employers to identify expectations and vocabulary in professional writing
- **Faculty dissatisfaction with ETS Major Field Test as an assessment tool**
 - Discussed the merits of this tool during faculty meetings
 - Considered other tools for future assessment