Office of the Provost and Executive Vice President for Academic Affairs



To: Diana Gonzalez, Chief Academic Officer, Iowa Board of Regents **From**: Donna Vinton, Office of Institutional Research and Effectiveness

Re: Report on 2015-2016 Compliance with Continuous Quality Improvement

Legislation

Date: August 26, 2016

The attached report provides information on course-level assessments conducted at the University of Northern Iowa in compliance with Iowa Code Section 262.9 (36). Information for this report was gathered through a Qualtrics survey administered in March 2016. The survey was given to University of Northern Iowa faculty teaching courses enrolling 100 or more students in all sections over the 2015-2016 academic year. Faculty were invited to respond to the survey individually or in collaboration with other faculty teaching the same course.

In addition to requesting information on the types of course-level assessments being implemented and the kinds of improvements made in response to what was learned from the assessments, the survey also requested information related to the ways in which learning outcomes were communicated to students. Data showed that 91% of the faculty responding to the survey included learning outcomes for their courses on the course syllabus. Learning outcomes were also communicated verbally (81%), on a course website and/or eLearning course web page (61%), and on separate handouts or study guides (50%). Fifty-two percent of faculty respondents also indicated they identified relevant learning outcomes with information for specific assignments.

The attached report provides information on the types of course changes faculty reported making as a result of what they learned from their assessments of student learning. It is worthy of note that, of the top five changes reported, four deal directly with the student learning experience—the assignments they are asked to do, their activities and experiences in the course, the class time spent on specific course content, and the amount of guided hands-on practice that supports their learning. The fifth most frequently noted course change noted by faculty was to review or revise course texts and other resources.

In addition to multiple-response survey items, the 2015-2016 CQI faculty survey included an open-ended question asking faculty to provide more detailed information on changes they had made to their classes as a result of their assessment of student learning; over half of the survey respondents shared stories of their experiences. An examination of these personal narratives showed several repeated themes—the importance of providing current, usable, and relevant resources; acknowledgement of student knowledge and experience in selecting and presenting course content (scaffolding); creating interactive and engaging class activities in addition to lecture; use of technology to enhance learning (e.g., flipped class or blended classes, use of videos and Internet-based resources); the use of formative assessment to check on students' progress, along with early and ongoing feedback on students' work; and faculty collaboration across course sections. Selected examples of the narratives collected are included in the attached report.

At UNI we believe in the power and critical importance of good teaching. The Continuous Quality Improvement survey for this year again provides evidence of this belief in action.

University of Northern Iowa CQI Report for 2015-2016

This page provides summary information on the types of assessment strategies used during 2015-2016; the following pages provide an overview of the types of course improvements undertaken by faculty and examples of assessments and related activities in selected courses.

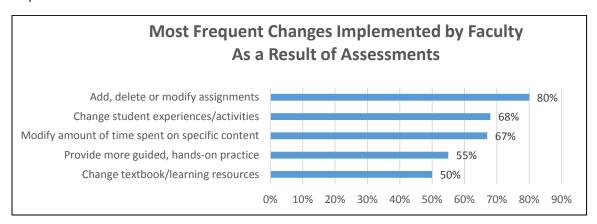
| Continuous Improvement in University of Northern Iowa Courses | |
|---|---|
| August 2016 | Report Date |
| Fall 2015/ Spring 2016 | Report Period |
| Number of Courses, Students Enrolled | |
| 120/787 | Total Number of Courses Offered/Total Number of Sections Offered in 2015-2016 |
| 109, 441 | Total Student Enrollment in Courses |
| Number of Courses ¹ Utilizing Continuous Improvement Strategies and Percent of Respondents Reporting | |
| 242 | Locally-developed tests or quizzes (81%) |
| 198 | Graded homework assignments (66%) |
| 171 | Observation of students doing in-class activities (57%) |
| 134 | Rubrics or evaluation forms for culminating project(s) (45%) |
| 127 | Specific questions on tests or quizzes (43%) |
| 119 | Journals, written reflections, discussion boards, blogs (40%) |
| 116 | Rubrics or evaluation forms for individual project(s) (39%) |
| 111 | Faculty/professionally assessed presentation or project (36%) |
| 94 | Formative (non-graded) assessments over the term (32%) |
| 70 | Peer-assessed presentation or project (23%) |
| 69 | Faculty discussion of student performance across sections of course (23%) |
| 67 | Survey of student perceptions of their learning (22%) |
| 60 | Faculty review of mid-term and final grade distributions (20%) |
| 59 | Comparison of course syllabi across sections (20%) |
| 48 | Pre- and post-tests (16%) |
| 36 | Review of student portfolio (12%) |
| 31 | Field experience evaluation forms (10%) |
| 21 | Department/program monitoring of DFW rates (7%) |
| 21 | Clicker questions/polling (7%) |
| 19 | Student performance in subsequent courses (6%) |
| 8 | Comparison of performance with professional licensure requirements (3%) |

Total number of strategies in use is greater than the total number of courses because many courses employ more than one continuous improvement strategy.

Other responses included the following methods for assessing student learning: class discussions, national standardized tests, comparison of test results across course sections, in-class demonstrations by students, individual meetings with students to discuss performance, the use of SGID (Small Group Instructional Diagnosis) to gain information on student perceptions of what is working/not working in a class and what they and the instructor could do to increase learning.

Overview of CQI Activities at UNI

As part of the Qualtrics survey administered in March 2016 to faculty teaching courses serving 100 or more students per academic year, one question asked faculty what kinds of changes they were making as they gathered assessment information and worked on continuous improvement. The table below summarizes their responses.



Selected Examples of Assessments

The Qualtrics survey responses for the 2015-2016 academic year included many examples of the efforts made by faculty to keep their courses current and engaging and to support student learning. The examples below are just a very small sample of those provided.

Educational Technology and Design (INSTTECH 1031) "This course is a team effort. We collaborate to create and deliver our teaching materials. We standardize on how we assess the projects/assessments that we assign. The five professors and two graduate assistants meet every Tuesday morning to discuss, share and evaluate our course materials. Course development is an ongoing process. Using the INTASC Standards and ISTE Standards we have identified the knowledge, skills and dispositions goals that we want our students to develop. Over the years we have reviewed our students' success and modified our course to achieve these goals. Some of these improvements include the following: 1) Better convey the goals of this course by providing a visual diagram that depicts the sequence of the learning activities. 2) Make the connections between our activities and the standards by listing and discussing their connections with the ISTE/ITASC Standards. 3) In an effort to provide our course aligning with the Universal Design for Learning strategies, we provide our materials in multiple formats (video and textual). 4) This past semester we had a hearing-impaired student. In an effort to accommodate her needs, we closed-captioned all of our videos, which will also support students who learn better when they are provided with a visual representation of an auditory track. 5) This year, both in response to our not being in Schindler Education Center and as a pedagogical trial, we flipped our classroom. We previously had lecture on Monday and then labs on Wednesday and Friday. This year, we recorded our lectures and expected our students to watch them so that they would be able to discuss and work with the content in the Wednesday lab. 6) We formerly assigned a textbook for students to purchase and read as a background for the class. The textbooks were rarely up-to-date and the students often didn't read the chapters. We decided to present the important

information in an online format. We called them RWLDs because they provided the students with Readings/Writings/Listenings/Doings that they needed to complete. The beauty of this was that we could keep the materials updated and the students would be able to explore the material through a variety of media."

Soundscape: Music in Culture (MUSIC 1100) "Students who elect Soundscapes to satisfy Category 3A of the LAC are usually widely distributed across a range of pre-course musical experiences. Some have studied multiple instruments since their grade school days, others have dabbled in self-taught musical exploration, and a significant number would identify themselves strictly as consumers (rather than producers) of music. The challenge of engaging students with such diverse backgrounds is obvious, but the playing field is significantly levelled when course goals emphasize listening and communication skills rather than standards that are closely related to 'musical literacy,' i.e. familiarity with musical notation and technical vocabulary. Even experienced musicians find they are challenged by the task of finding precise or compelling language to describe musical experiences. I believe all of my students benefit from the challenge of talking and writing about music, and in having the opportunity to make multiple revisions to their written work as their perceptions are refined and clarified. As a consequence of classroom conversations, I have learned to treat assignments in my Soundscapes class in much the same way as I treat assignments for my individual instrumental students: they must practice their essential skills regularly, always refreshing their fundamentals even as they acquire more advanced techniques. Skills must be reinforced by being put to use, not just "covered" and left behind. A skills oriented and student-centered approach leads to more time revisiting and practicing course content, and it gives me the latitude to linger with a particular course goal until the class as a whole has grasped it."

Cornerstone (UNIV 1000) "As an integrated communication course, it is vital that students have strong academic reading skills. It has been core to my course to work with students on critical reading, integrating sources, and other upper-level reading skills. After assessing the types of sources students were using for research, I determined that they were defaulting to sources that didn't meet university-level standards. I found that students were afraid to read academic journal articles because they thought they wouldn't be able to understand them. Because of this finding, I added an exercise where we worked as a class to read through a journal, pausing to reflect on what they were reading, to discuss key ideas, and to look up unknown terms. This activity was added in the early part of the course, before the already-established upper-level reading assignments. As a result, the quality of sources on subsequent research projects increased dramatically."

General Physics I (PHYSICS 1511) "Many years ago, to increase student engagement and laboratory activities in General Physics I, some topics had to be omitted. One of the dropped topics was fluids. More recently, it was more clearly recognized that MCAT examinations typically contained questions and problems related to fluids. The MCAT preparation guide also indicated that significant knowledge of the physical principles of fluids was expected. After a couple of Physics faculty meetings about the issue, it was decided that fluids would be restored. The Physics Department Head also solicited the opinion of the Head of the Department of Biology, who was very supportive. With that consensus, fluids was restored as a covered topic in all sections of General Physics I, starting Fall 2015."

Legal and Social Environment of Business (MGMT 3100) "The unifying theme in this course is an investigation of the degree to which government should impose rules on business practice (government regulation). Early in the term in order to place the government intervention theme in context, we examine free market reasoning (what we might label 'market regulation'), along with ethics and social responsibility (self-regulation). From the final examination results, I began to recognize that students either did not

remember the ethics materials or did not recognize the role of the ethics portion of the course in responding to a comprehensive case about when a new rule should be imposed on business. At that point, I added some notes to the syllabus, added some materials to a standard handout and reminded the students from time to time during the term of the ethical dimensions of whatever topic we were addressing. Since I write the textbook we use, I also added ethics materials throughout the text rather than confining them to the two chapters directly addressing ethics and social responsibility. (That latter decision to amend our approach to ethics in the textbook was also encouraged by reviews from faculty members using our text at other universities.)"

World Geography (GEOG 1110) "For most students this is an elective to fulfill University requirements. There is a broad base of student interest in the subject matter from 'I've always hated Geography' to an enormous thirst for knowledge of the world in which we live. Geography is neglected in our high schools and most students enter the class with very little geographic knowledge at all. I begin my class with a fun quiz that shows people and places from around the world. The class is divided into four groups of 11 students who must work as a team to identify the pictures. It gives me an a good assessment of the collective knowledge base as well as helps me identify potential class leaders, those who take charge of the assignment. I provide a wide array of videos that I glean from the web. It really takes a long time to get the right ones that give the essence of each Realm that we study. I try to bring those which not only show the countries but demonstrate the degree of connectivity that each of us has with the world and how what happens in one corner impacts people in far off places. I also use a great deal of anecdotal knowledge based on my previous employment as a global commodity manager at John Deere. I have traveled to over forty countries and bring my experiences to the classroom daily. I use personal pictures and videos to bring the sights and sounds to the maps and text materials required for the class. I also challenge them to each write a short term paper on controversial topics from global immigration to defining diversity and what it means to 'embrace' diversity, using examples from the world to support their conclusions. I encourage them to look at subject matters from a personal and academic vantage point and ask them to approach subjects from multiple viewpoints. The results are often very rewarding to me as an instructor."

General Biology: Organismal Diversity (BIOL 2051) "I update, revise, and write additional lectures every semester to keep the course information current and to provide students with learning experiences that are relevant and timely. For instance, during the recent Ebola outbreak, we spent an extra week on viruses in response to student interest and to better present issues of public health. During the recent outbreak of mumps at UNI and on the University of Iowa campus, I added a week-long section on the history of vaccination and the current controversy on the 'anti-vaxxer' movement, to better address issues that the public misunderstands. In addition, we update and revise laboratory activities regularly, such that the course has been completely revised over the past several years, based on instructor feedback, student performance, level of student interest, etc."

Religions of the World (RELS 1020) "In the unit on Islam, I used to lecture on differences between Sunni and Shia Islam. But students were not able to remember the differences. It is very important for religious literacy that students know these differences. They cannot understand any news article that comes out of the Middle East without knowing these differences. So I created a new assignment in which the students work in groups to sort features of Sunni and Shia Islam into correct categories and subcategories (e.g., 'views toward leadership,' 'views about the Qur'an'). This active learning assignment significantly improved their ability to remember information. The test of their knowledge is a quiz in which I give them a recent news article about ISIS in Iraq and the Syrian Civil War, and they have to explain the article to a friend who doesn't understand the issues. The students' grades on this assignment went up after I switched from lecture to the matching-game."