
To: Rachel Boon, Chief Academic Officer, Iowa Board of Regents
From: Megan Vogt-Kostner, Office of Institutional Research and Effectiveness
Re: Report on 2020-2021 Compliance with Continuous Quality Improvement Legislation
Date: May 28, 2021

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). Faculty teaching courses enrolling 100 or more students during the 2020-2021 academic year were asked to respond to a survey, either individually or in collaboration with other faculty teaching the same course, to collect information on the ways they monitor and work to strengthen student learning in their courses. Throughout the ongoing COVID-19 pandemic, UNI administrators, faculty and staff worked diligently to deliver the same high quality academic experience that sets UNI apart from other institutions. During the 2020-2021 academic year, the majority of courses were offered in-person/on-site or in a hybrid model, with only a small number of courses entirely online. For Spring 2021, 80% of courses at UNI were delivered in-person or using a hybrid format.

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 96% of the faculty responding to the survey included learning outcomes for their courses on the course syllabus. Learning outcomes were also on a course website and/or eLearning course web page (75%), communicated verbally (69%), with information for specific assignments for the course (43%), and in PowerPoint presentations provided during the course (42%).

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 students are asked to complete, their activities or experiences in the course, the class time spent on specific course content, and to review or revise course texts and other learning resources. The fifth most frequently recognized course change noted by faculty was to change the assessment strategies to gain more accurate insight into what students are learning.

In addition to multiple-response survey items, the 2020-2021 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; almost seventy-five percent of the survey respondents shared stories of their experiences. An examination of these personal narratives showed several repeated themes— instructors enhanced or changed their courses to meet the needs of students as well as the best practice standards in online instruction, instructors were consistent and intentional to use the same textbook and educational materials across sections, allowing all instructors teaching the course to adopt a common set of learning objectives, similar assessment formats and the ability to review the learning outcomes periodically throughout the semester, and instructors included weekly participation assignments or group discussions help students to practice the application of theory to case studies. 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 2020-2021

This page provides summary information on the types of assessment strategies used during 2020-2021; 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.

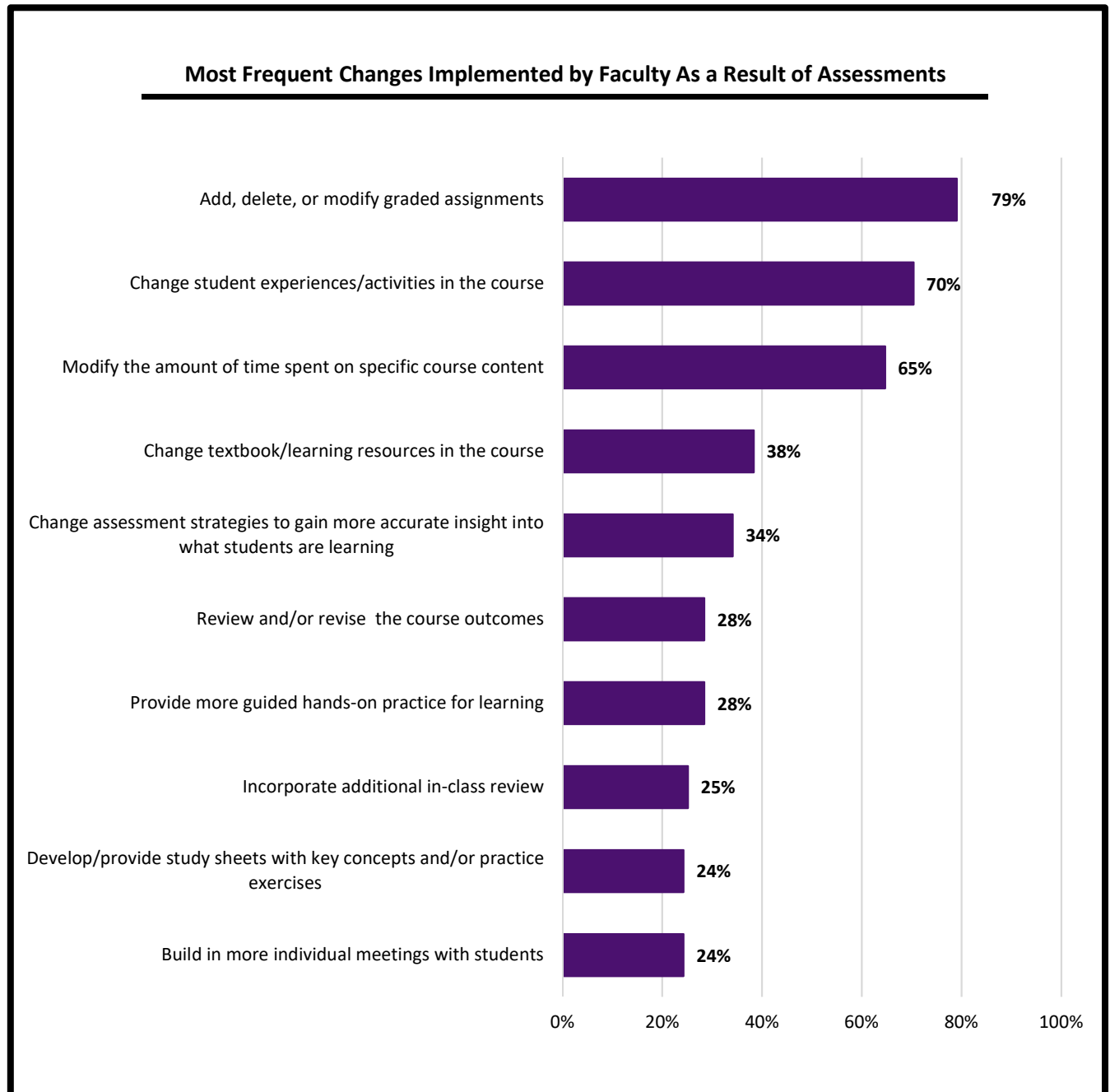
Continuous Improvement in University of Northern Iowa Courses	
<i>June 2021</i>	Report Date
<i>Summer 2020 – Spring 2021</i>	Report Period
Number of Courses, Students Enrolled	
<i>109 courses</i> <i>586 sections</i>	Total Number of Courses Offered (enrollment > or = 100 students) Total Number of Sections Offered in 2020-2021 (enrollment > or = 100 students)
<i>91,043</i>	Total Student Enrollment in Courses
Number of Courses ¹ Utilizing Continuous Improvement Strategies and Percent of Respondents Reporting	
242	Graded homework assignments (72%)
227	Locally-developed tests or quizzes (68%)
202	Student understanding of content and concepts as revealed in class discussions (60%)
173	Observation of students doing in-class activities (52%)
151	Specific questions on tests or quizzes (45%)
135	Written or oral student reflections on their experiences and/or learning (40%)
117	Rubrics or evaluation forms for individual project(s) (35%)
112	Journaling, discussion boards, blog (34%)
107	Discussion in individual meetings with students (32%)
86	Faculty assessment of presentations or projects (26%)
74	Comparison of course syllabi and/or assignments across sections (22%)
73	Faculty review of mid-term and final grade distributions (22%)
71	Formative (non-graded) assessments over the term (21%)
69	Survey of student perceptions of their learning (21%)
68	Faculty discussion of student performance across sections of course (20%)
61	Rubrics or evaluation forms for culminating project(s) (18%)
49	Peer assessment of presentations or projects (15%)
34	Field experience evaluation forms (10%)
32	Evaluation of student performance in simulations activities (10%)
28	Pre- & post-tests (8%)
28	Clicker questions or polling (8%)

¹ 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: student's performance in subsequent courses, department/program monitoring of DFW rates, review of course or program student portfolios, comparison of performance with professional licensure requirements, the use of Small Group Instructional Diagnosis (SGID), external reviewer assessments of presentations or projects, research or semester long projects, and assessments (diagnostic, formative, or summative) of course performance.

Overview of CQI Activities at UNI

As part of the Qualtrics survey administered in March, April and May 2021 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 2020-2021 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.

World Geography (GEOG:1110): I believe that my mission as a geographer - to improve geographic-spatial literacy - is critically important as globalization and global climate change play ever-larger roles in all our lives. Through repeated assessment of my classes over 25 years of teaching World Geography, I teach my introductory classes from a conceptual, systematic approach, illuminated by generous examples of my own personal experiences as a student, a geographer, and an enthusiastic traveler with a deep and wide exposure to many varied environments and cultures. I use my narrative lecturing style to engage my large introductory classes full of iPod-toting, web-savvy freshmen using primarily images and video led discussions. I have found, through assessment feedback, that information-heavy introductory core-curriculum classes can be counter-productive, turning students off both geography and learning as a whole because of their overemphasis on memorization rather than understanding. As a result, I teach my World Geography students with the goal to help them develop their critical thinking and begin to create a spatial understanding of the world around them. I teach World Geography as I would a hard-science class, emphasizing the broad conceptual underpinnings of our geographic understanding of the spatial variation in wealth, culture, access to health-care, and political representation, in process creating for them a model of power-relations, global inequalities, and cultural attributes that students can use to evaluate regions they are subsequently exposed too.

General Biology Organismal Diversity (BIOL:2051): Because of past experiences and our general perceptions of how little exposure pre-college students have to the basic concepts of evolutionary theory, and evidence of the many misconceptions that students have regarding the mechanisms of, implications of, and the validity of, evolutionary science, we have focused the first few weeks of the course on providing a detailed explanation of evolution and the evidence that supports it. In addition, we also explore cultural attitudes towards this branch of science and the reasons why the US public often resists it and ranks poorly in the understanding of genetics, evolution, and scientific evidence in general. As another example, based on social attitudes of the public, we added an evidence-based exploration of the recent anti-vaxxer social movement, including exposing students to primary medical research literature (including the original fraudulent study, now retracted, by Andrew J. Wakefield that linked the MMR vaccine as a cause of autism and subsequent meta-analyses that have thoroughly debunked this association). We also use this section of the course to promote understanding of probability values, odds ratios, basic biostatistics and to teach them how to read and understand primary scientific literature. Lastly, we spend the first two weeks of the course delivering up-to-date and timely information on the Covid-19 pandemic, including where it came from, how it relates to prior zoonotic coronavirus outbreaks, how and why the virus affects individual humans and their organ systems differently, mask type efficacy, and strategies in vaccine development. For Fall 2020, all of the course material, including these newly developed course sections were successfully converted to an online format. The student grade distribution was similar to, but slightly higher than, previous in-person versions of the course and only a very small handful (5-6) out of 119 students earned less than a C (this is about half the usual percentage for this course). Student assessments and a course survey were very positive.

Educational Technology & Design (INSTTECH:1031): My course was already designed to be blended with online lectures, so it wasn't too difficult to transform it into a synchronous course. The most important part of this transition involved addressing the students' social and emotional state. We held active discussions about what they needed to survive this event. They told me that the transition had sent them into isolation and they needed to develop connections. I modified my class to address these needs by having check-ins at the beginning of each class and extending student hours to provide needed support. Deadlines were no longer set in stone I worked with my students to support their success. During the final days of our Spring 2020 semester, my colleagues and I surveyed our students to find out about their experiences. We asked them about their feelings concerning how our course infrastructure, our teacher-student/student-student support systems, and our online learning materials supported them through the transition. This was quite informative and is the basis for an article that we have submitted to be published. The most important finding in our results had to do with supporting their social and emotional selves. They reported that their teacher's presence was one of the highest factors in successful making the switch. They appreciated the feeling that their instructors cared about their success. The increased use of classroom discussion, weekly checklists, reassuring messages, individual emails, and individualized communication were important. Based upon these results, I have continued to provide our expanded teacher presence. I begin each of my online classes by asking each of my 33 students a question that will allow them to share something about themselves. This has developed a feeling of community that has nurtured their learning. While I have not made any comparisons between my students' work this semester in comparison to past semesters, I have had online students (who I have never met face-to-face) tell me that they look forward to engaging in my class and that they feel special because I talk with them. These findings and my success with this strategy have changed how I teach forever.

Elements of Weather (EARTHSCI:1200): Students' participation and involvement play a very important role in teaching. To achieve the best teaching effect, various teaching methods I have learned are selected and used, such as lecture, PowerPoint presentation, demonstration, and group discussion. It is my philosophy that teaching will be more effective when students actively participate in the process of teaching-learning. I learned through my assessment that students want more in class activities to help them understand the complicated science concepts, so I prepared several fun experiments such as cloud in a bottle, mysterious hand holding water, the cooling balloon etc. These activities increased students' engagement and improved their understanding of the contents. For future offerings of this course, I will continue to improve my teaching through various opportunities.

Teaching Mathematics in Elementary Schools (MATH:3203): I had to make adjustments to the course in order to accommodate the new hybrid format due to COVID-19 concerns. I had to make decisions to cut some content as well as create new course activities. I also made decisions on how to better assess student learning given that we were not allowed to have a field placement due to COVID (it is not required for this course, but is often built in). For example, the major assessment for the course is a detailed lesson plan. Instead of having students write this lesson at the end of the semester, students write this lesson plan throughout the semester, adding parts to it as we discover/learn about those parts in class. For instance, asking good questions while students are working on a task is important. When we cover this material in depth in class, the students update their lesson plans to include good questions for their specific lesson.