

# IOWA STATE UNIVERSITY

## 2019-20 Annual Report to the Board of Regents Course-level Continuous Improvement Plans

### I. Executive Summary

For the academic year 2019-20, the Iowa State Board of Regents adjusted the traditional reporting requirements imposed by Iowa Code Section 262.9(36) to allow universities to respond to the sudden COVID-19 crisis. The adjusted requirements permitted institutions to highlight the efforts made by faculty and staff to ensure that students continued to meet course learning objectives as course content was moved online. Our report for this year includes: high level data points, common practices used to improve pedagogy, and a narrative statement detailing how our faculty strove to maintain student engagement and assessment in an online environment.

#### **Number of courses, enrollment, and students**

	<b>2019-2020</b>	<b>2018-2019</b>
Total number of eligible high-enrollment courses	671	692
Total student enrollment in courses (duplicated enrollment)	234,553	258,702
Number of unique students enrolled in courses	29,898	31,398

The three most commonly cited methods of assessment used in large classes are: formative assessments such as clickers or quizzes, faculty review of exams or quiz grades, and faculty

evaluation of presentations or projects.

The three most commonly cited changes that faculty make in response to course assessment results include: modifying student learning experiences/activities, retooling class assignments or assignment instructions, and adjusting the time devoted to covering specific course content.

## II. Spring Semester Initiatives 2020

### A. Faculty Training in Online Pedagogy

During the spring semester 2020, 6,100 ISU courses had an online presence through the University-wide learning management system, Canvas. While faculty may use Canvas to deliver online content, many in person courses use Canvas to post course syllabi and assignments online. One measure of COVID's impact on our spring semester can be seen in our faculty Canvas usage rates. Notably, while 63% of the university's spring courses had a Canvas presence on or before March 10, 2020, by March 19 that number had jumped to 86%-a 23% increase within a one-week period. The remaining courses that did not maintain a Canvas presence (14%) were largely comprised of honors seminars, dissertation seminars or learning communities. Within a two-week period in March 2020, faculty and staff converted 6,100 in-person course sections to courses delivered virtually. In addition, other activities such as our campus-wide lecture series, adviser meetings, and faculty office hours continued virtually using Zoom and WebEx. These two platforms experienced a nearly 3,000 usage increase.

This massive shift in operations would not have been possible but for the work of Iowa State's faculty and staff as well as the effort of Iowa State's Center for Excellence in Learning and Teaching (CELT). CELT dramatically increased their programming and outreach efforts and posted accessible instructional materials online to ensure that instructors had the information they needed to move courses online. The major initiatives launched by CELT included:

- Creating a Quick Start Guide that showed faculty how to move courses online, interact with students, create assignments, build a sense of belonging, and deliver experiential learning activities.
- Updated "Teaching with Technology" webpages, in particular, the Instructional Strategies and Instructional Tools pages with information about how and why to use certain teaching-related technology.
- Hosted a panel discussion on "Alternative Assessments" featuring three faculty presenters.
- Moved from bi-weekly teaching tips to a weekly teaching tip. Our typical, pre-Covid-19 "link open rate" of the teaching tip ranges from 40-50%. During Covid-19 from March through May, our open rate ranged from 49-59%. The industry average for open rates within constant contact/higher ed is 19%.
- Established the CELT Response Team which held virtual open hours featuring CELT staff members and instructional designers. The CELT Response Team was available

8am-5pm to answer inquiries from instructors. In March, we hit a high of 20 inquiries per day.

- Worked with the Library to integrate Course Reserve materials seamlessly within individual Canvas courses.
- Assisted the Graduate and Professional Student Senate in moving their annual Research Symposium to a virtual event space.

## B. Representative Classroom Innovations

### 1. **Large Class (Chemical and Biological Engineering)**

Dr. Monica Lamm, Associate Professor CBE Department, CELT Faculty Fellow

Dr. Lamm replaced in-person class sessions with voice-over screen capture videos. In keeping with all of which were under 10 minutes in length. To adequately cover course content, Lamm produced and posted on average three videos per class period. She used a variety of classroom engagement strategies. For example, as an alternative to "turn to your partner" questions used in in-person lecture segments, she created Canvas discussions. Each Canvas discussion used the setting "users must post before seeing replies" checked to ensure that students engaged in their own independent thinking. At regular intervals, one of the co-instructors in the course reviewed the responses and posted a summary for students to clarify misconceptions about the course material.

In addition, Dr. Lamm created weekly low stakes quizzes in the course to encourage students keep up with course content and to allow them to track their learning process. In addition to the quizzes, students had to upload homework assignments to CANVAS. To enable students to "meet" with her during the semester, Lamm created virtual office hours.

### 2. **Large Class (Mathematics)**

Dr. Steve Butler, Associate Professor and the Barbara J. Janson Professor, Department of Mathematics

Dr. Butler used pre-recorded lectures delivered at roughly the same pace and content that used in in-person lectures. This format gave students the flexibility to watch the lectures on their own schedule, pause the lectures, and revisit lecture content as needed. During the spring semester, we were aware that some students had to share computer and wi-fi capacity with other family members and wanted to accommodate those students. In addition, we kept multiple lines of communication open with the students, including email, regular Canvas announcements, and a substantial number of scheduled virtual office hours. We structured assessments to use a variety of on-line tools.

3. **Large Class (Apparel, Merchandising, and Design)**

Dr. Kelly Reddy-Best, Assistant Professor, Apparel, Merchandising, and Design Program

To promote engagement during this course, the instructor required students to answer questions related to course reading assignments on the course's virtual discussion boards. Students logged into Canvas during the scheduled course time (3:40-5pm T/TH) to answer 5-6 questions. Students were instructed to spend 5-7 minutes on each question – the amount of time they'd normally spend in class on the learning activity. After students answered each question, they had to respond to the responses posed by two other student's responses with "what new you learned from their response" or "what is one thing you could expand upon in their response." The instructor then responded to at least one of each students' posts within the class period (as though she was commenting in real-time).

4. **Studio-Based Course**

Rob Whitehead, Associate Professor, Department of Architecture and CELT Faculty Fellow

Architecture 302: Architectural Design Studio IV, aims to teach students how to design and document urban housing schemes. This design work is reiterative and requires a considerable amount of time and discussion between the instructor and the students--in many ways it mimics the professional world of design. As the course transitioned online, the instructor mimicked how the professional world of architecture often practices. He used Zoom to organize class meeting times at regular times as a class and then consulted with each design team individually as well. During these design crits, Zoom gave the class the ability to share screens and interact with each-other in real-time. This fall, the instructor will use Canvas and CyBox to share additional drawings, photos, and written assessments and reflections. One item that MAY change is our reliance on using primarily digital representations of the work--normally we use drawings and models to test the work--but without access to fabrication labs in the College we will have to adjust to more drawing-centric activities. Learning outcomes will be adjusted accordingly.

E. **Extension Specialist**

Dr. Angela Shaw, Associate Professor and Extension Specialist, Department of Food Science and Human Nutrition

As an extension specialist, some of our team spring meetings/programs were held virtually and we reached out to the Iowa State University Extension IT group for

assistance in holding spring meetings/ programs via Connect and Zoom. For the programs that required face to face for certification (no virtual option), this fall we are conducting a risk assessment, programs/meetings with more than 20 individuals, will be rescheduled for a later date. For all programs/meetings with less than 20 individuals, we will assess the immediate needs of our clients and seek to deliver the programs in smaller groups.

### III. Summer 2020 Initiatives

Although Iowa State is proud of the efforts made by faculty and staff in the spring to move courses and academic services to a virtual environment, we have taken several steps to improve the quality of our online programming. To begin, the Office of the Provost and Senior Vice-President, in consultation with the college deans, issued a new policy document titled: "Summer Guidelines for Virtual Instruction." These guidelines require faculty to incorporate increased opportunities for faculty-student engagement into online courses. We are in the process of updating these guidelines for fall instruction.

In addition, CELT has taken extraordinary steps to improve instructors' ability to teach online.

Total participants to CELT summer programming to July 2<sup>nd</sup> is **647**. Some major new highlights with regards to programming are:

- "[Choose your instructional tool adventure](#)" a 30-minute session focused on various [instructional](#) tools
- The CELT team, collaborating with campus partners, established the [ISU Course Template](#) creating a straightforward the process to aid instructors in including the must-have elements in their online courses.
- Development of [virtual Summer CELT Course Design Institute](#). We had an initial limit of 15 people per three institutes. We had to raise the number to 30 for June and now 50 for July and August! SVPP and CELT are providing \$500 stipend to participants who go through the programming and submit a Quality Matters self-review.

Training participation by topic:

#### ONCE stand alone trainings on ISU Course Template

June 1: 65 participants

June 9: 39

June 30: 34

#### ONCE Departmental Trainings

since May 8th: 372

#### Online Team-Based Learning Program

June 23-25: 32

Inclusion sessions

Syllabus: 5

Accessibility: 11

Inclusive Learning Environ.: 11

Quality Matters Programming

APPQMR (June 11 & 12) : 11

Instructional Adventures

Communication: 13

Study Tools: 8

Engagement: 16

Summer Course Design Institute

June 22-25: 30

July and August CDI – are currently enrolled at 50 individuals each.