Executive Summary

For academic year 2018-2019, Iowa Code Section 262.9(36) required that all undergraduate courses typically enrolling 100 or more students annually have continuous improvement plans implemented. At Iowa State University, 692 different courses enrolled more than 100 students. Those continuous improvement plans were therefore in place during AY18-19 with a focus on student achievement of outcomes, assessment strategies used, plans for improvement, and impact of their plans on student success. Both summative and formative assessment strategies were used in the improvement plans. The most frequent changes planned to improve student learning in the courses are: changing student learning experiences and activities, modifying class assignments, modifying the time spent on specific course content, and changing course delivery methods and pedagogy. These changes are consistent with the other improvement plans developed from the prior academic year’s implementation of the continuous improvement strategy.

Findings

The survey instrument used in AY17-18 was again used for this year’s data collection. The survey was completed by a single point of contact for each course, therefore establishing beneficial collaboration across multi-instructor courses. Of the 692 courses that enrolled 100 or more students, 675 had a respondent complete a survey. The results of the survey are shared with departments as a part of ISU’s continuous improvement and course refinement process. The following two pages summarize the findings:

• Data on student enrollment in courses covered under the legislation,
• Data on the types of assessment approaches used within the continuous improvement plans,
• Data on the types of changes faculty are planning to make based on the results of the plans, and
• Summaries of selected open-ended responses from instructors on the impact of the continuous improvement plans.

Questions related to data contained in this report or the implementation of the continuous improvement plans at Iowa State University should be directed to Dr. Julia LaBianca (labianca@iastate.edu) in the Office of Institutional Research or Dr. Karen Zunkel (kzunkel@iastate.edu) in the Office of the Senior Vice President and Provost.
### Summary of Continuous Improvement in Iowa State University Courses

<table>
<thead>
<tr>
<th>Report date</th>
<th>July 2019</th>
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</thead>
<tbody>
<tr>
<td>Report period</td>
<td>AY2018-2019</td>
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#### Number of courses, enrollment, and students

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
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<tbody>
<tr>
<td>Total number of courses</td>
<td>692</td>
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<tr>
<td>Total student enrollment in courses (duplicated enrollment)</td>
<td>258,702</td>
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<tr>
<td>Number of unique students enrolled in courses</td>
<td>31,398</td>
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#### Number of courses utilizing various continuous improvement assessment strategies

- Faculty review of exam or quiz grades: 522
- Faculty review of scored term paper: 140
- Faculty review of juried exhibit or performance: 22
- Faculty review of student portfolio: 40
- Faculty review of presentation or project: 238
- Faculty review of licensure or standardized tests scores: 7
- Faculty review of student survey/evaluation of course outcomes: 101
- Faculty evaluation of student performance in subsequent courses: 42
- Faculty monitoring of course grades and D/F/W rates: 8
- Faculty discussions across multi-section courses: 1
- Formative assessments such as clicker and quizzes: 630
- Other (lab reports, homework, discussions, observations): 139

### Types of Changes Planned Based on CIP Results, Number of Courses

- Change course delivery/pedagogy: 169 (15%)
- Change the assessment strategies to gain more accurate insight into students' achievement of learning outcomes: 133 (12%)
- Revise the course outcome or objective: 33 (3%)
- Modify class assignment or assignment instructions: 216 (19%)
- Modify the course time spent on this specific course content to better meet student needs and/or abilities: 200 (17%)
- Change student experiences/activities in course: 235 (20%)
- Change textbook/learning resources used in course: 85 (7%)
- Refine (or enforce more strongly) the prerequisite background needed to enroll in the course: 44 (4%)
- Other (technology/equipment upgrade; modification of experiments; improve TA's delivery of material; more detailed syllabi): 40 (3%)
Summaries of Continuous Improvement Plan Impact

AER E 294X (Make to Innovate) – Through continuous assessment and improvement plans, the instructors have further refined the program to allow students to learn professional development skills in addition to learning hands-on engineering skills.

BUSAD 250 (Introduction to Business) – The instructors’ continuous improvement efforts in BUSAD 250 have been directed at linking together lecture/text material, with real world business examples and completion of a collaborative business simulation where students can develop a solid introduction to business. This approach incorporates team based activities, analytics, exams, presentations and peer evaluations to assess student performance. The results of this approach have been well received by students and is reflected in favorable student performance.

DSN S 102 (Design Studio I) – As the faculty strategically think about students’ education, a continuous improvement plan allows them to modify course material and develop pedagogical strategies to engage students in the various design principles they need for their designated majors. Qualitatively, the impact was shown this year in a wearables design show that not only pinpointed various principles but created a space for the exhibit of these wearables in relation to the project briefs.

HD FS 486 (Administration of Human Services Programs) – In listening to feedback from former students, the instructor has been able to hone in on specific topical areas that they feel are most beneficial. Each semester the constructive feedback gives the instructor the opportunity to ensure that they are creating a course that meets the needs of their students as those students move to their internships and graduation. More practical application and focus on professionalism are two things that have come from continuous improvement of the course.

SP CM 312 (Business and Professional Communication) – The CIP for this course has helped us to reevaluate our learning outcomes each semester, and to collaborate between sections on how we are measuring our learning outcomes, improving consistency across multiple sections of the course. It has also aided us in having important conversations about our textbook selection for the course and how it supports the course outcomes, and has led to us exploring new options for a textbook, which we hope to change going into Fall 2019.

UST 101D (First Year Seminar I: Student Athlete Experience) – Continuous improvement plan efforts have led to the addition of a core values and goal setting workshop in UST 101D. This lesson provides students with the opportunity to self-reflect on what they believe, why they believe it, and who/what has shaped their beliefs. Following the core values self-assessment, students are asked to create goals for the semester in the areas of academics, athletics, and their personal life, and then reflect on if/how their core values are related to those and to what capacity.

WGS 160 (Gender Justice) – After a full overhaul of the class last Spring, the instructors used the Fall 18/Spring 19 semesters to refine their approaches and activities to match the new content trajectory for the class. In both semester, the instructors noticed increased student engagement during lecture on Mondays and small group discussions on Wednesdays. They have also seen the overall scores for the class on the end of semester evaluations go up and students’ comments have trended far more positively, particularly with regard to the book being used and the real-world kind of knowledge they are taking away from a short 8-week class. The instructors also noticed a reduction in backlash when confronting privilege, particularly from white, cis, straight, male students who enroll in the second half semester section out of desperation for credits.