Creating fully online versions of high demand General Education (GE) courses to boost enrollment options for students. A brief overview of the program, as well as corresponding enrollment and performance data.
Course Design Institute Report 2008-2014

In Spring 2008, the Course Design Institute (CDI) was launched with the goal of creating fully online versions of highdemand General Education (GE) courses in order to boost enrollment options for students during the San Diego State University (SDSU) Summer Session.

Since the program’s inception, 78 faculty members have participated in the CDI to develop 85 online courses that have enrolled a total of 14,172 students. This report is intended to provide a brief overview of the program, as well as corresponding enrollment and performance data.

Overview

The CDI is an initiative led by Instructional Technology Services (ITS) and supported by Academic Affairs that provides course release funding to selected faculty members in support of the development of fully online versions of courses only previously offered in the classroom. Selected faculty engage in a semester-long Professional Learning Community (PLC) with peers in other disciplines, ITS Faculty Fellows, ITS staff members, affiliated campus partners, as well as previous CDI faculty, in order to better understand effective practices for developing and teaching online courses.

Objectives

The CDI was designed to promote the following outcomes:

- Improve student learning outcomes through high quality curriculum design
- Address physical learning space constraints
- Increase access to GE and as well as high-demand lower-division and upper-division major courses in high-demand majors courses to improve retention, time-to-degree completion and 4-year graduation rates
- Enhance faculty proficiency using instructional technology
- Provide a generation of “digital natives” and busy adults with choice of instructional modality including more flexible and convenient course scheduling options

“...For me, the CDI surpassed the goal of learning how to successfully take my course online by providing critical insights for my overall pedagogy, as the concepts and strategies I learned were applicable to all of my courses, whether in the classroom or online. This is because I learned principles of course design that I had not been exposed to previously, in addition to new insights for creatively using technology in my courses."

-Katie Hughes, RWS
Context
The demand for fully-online courses at SDSU has grown rapidly in recent years, fueled by the alignment of a “perfect storm” of contributing factors: rapidly rising higher education costs, shrinking State budgets, increasingly impacted classrooms, more diverse student bodies, improved technological innovation, and the need to support stronger retention and graduation rates. However, despite this increased demand, a significant barrier to entry exists for many faculty who wish to develop online courses but lack the knowledge or expertise required.

Academic leaders at SDSU recognize the growing student demand for online courses, but also understand that offering courses online is only beneficial if the academic rigor of the course remains upon transitioning the course to an online modality. As a result, SDSU is taking a strategic approach toward online education by focusing on courses with the biggest impact and potential to improve time-to-degree, retention rates, and other key performance metrics.

The CDI supports this approach by instituting a replicable online course development process that will enable SDSU to sustain momentum in online education.

Description
SDSU offers the CDI to cohorts during the Fall and Spring semesters, with each cohort consisting of approximately 10-20 faculty members from various disciplines. Faculty meet face-to-face twice a month where they learn about effective practices for online education and discuss current issues during the course development process. Additionally, faculty participate in an asynchronous online course, the “Teaching Online Primer” (TOP) hosted in the campus Learning Management System (Blackboard Learn) and in synchronous virtual workshops and online sessions that provide the opportunity to use the campus Web Conference tool (Blackboard Collaborate). This allows faculty to take on the role of a student, an experience that reinforces quality practices by giving them the end-user experience of being an online learner.

In working with colleagues outside their usual circles, faculty members focus less on content development, placing greater emphasis on pedagogy. Accordingly, the CDI primarily highlights sound instructional design concepts, with a focus on creating engaging online learning, technology fluency, course material development, and assessment of student learning.

At the conclusion of the CDI, newly developed online courses are then evaluated against the CSU Quality Online Learning and Teaching (QOLT) Rubric for Online Instruction to ensure that the course meets the necessary criteria to be considered a quality online learning experience.

Participation
The CDI is an institution-wide initiative designed to benefit all academic departments on campus. Through Fall 2013, the program has helped develop 85 quality online courses, with representation from each of the University’s colleges (Figure 1).

<table>
<thead>
<tr>
<th>College</th>
<th># of Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts &amp; Letters</td>
<td>36</td>
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<tr>
<td>Business</td>
<td>5</td>
</tr>
<tr>
<td>Education</td>
<td>5</td>
</tr>
<tr>
<td>Engineering</td>
<td>4</td>
</tr>
<tr>
<td>Health and Human Services</td>
<td>4</td>
</tr>
<tr>
<td>Professional Studies and Fine Arts</td>
<td>19</td>
</tr>
<tr>
<td>Sciences</td>
<td>12</td>
</tr>
</tbody>
</table>

(Figure 1)
Timeline
Courses developed during the CDI are offered for enrollment during the Summer Session immediately following the faculty member’s participation in the program. The Summer Session is divided into three parts: two 6-week accelerated programs that run from May-July (S1) and July-August (S2), respectively; and one 13-week session (T1) which runs from May-August. The total number of CDI courses offered per session can be seen below. (Figure 2)

Outcomes
The program is regularly assessed using an online survey given to students, official course enrollment data, and observations made throughout the CDI by ITS facilitators and faculty to measure the effectiveness of the PLC related to achieving the Institute’s goals.

Enrollment
As previously stated, the primary goal of the CDI is to fast-track the development of high-demand online courses that will ultimately work towards improving student access to courses with the intent to improve retention and time-to-degree completion rates.

The overall impact that the CDI has had on increasing student access to courses was measured by comparing the total enrollment numbers for each course from the previous two years prior to CDI with the online enrollment of the course offered in its first Summer Session after the CDI. (Figure 3).

In each case, without exception, the number of students enrolled in the first offering of the online version of the course was higher than the enrollment of the same course delivered in a traditional modality the previous two years. On average, courses redesigned through the CDI have seen a 77% boost in total enrollments per course, with increases ranging from 52% on the low side to a high of a 107%. As such, the preliminary analysis of these data indicate that faculty participation in the CDI does facilitate greater access to courses and higher enrollment.

Student Satisfaction
The institutional benefits related to increased enrollments and greater access to courses can only be realized if the instruction delivered online is equivalent in parity and academic rigor to its classroom counterpart, and moreover, whether the learning experience was satisfactory from a student perspective.
Students in each course were asked to complete the Community of Inquiry (CoI) survey and rate their level of agreement with a series of statements related to the instructor’s performance and the design of the course. Student responses were scored from 1 (strongly disagree) to 5 (strongly agree). Two specific questions asked whether or not students were satisfied with the course (Figure 4) and whether they were satisfied with the instructor’s performance overall (Figure 5).

The results from these questions indicate that students are largely satisfied with the courses developed via the CDI. In each of the last six years, an average response greater than four (4) has been received for both questions, which points to high levels of overall student satisfaction with not only the online course itself, but also the instructor’s performance.

Ultimately, levels of student satisfaction cannot measure the effectiveness of the online learning experience, nor can the results be used to determine whether or not the online classroom maintained the academic rigor of the face-to-face classroom.

However, these results indicate that online students are largely satisfied with the online courses created through CDI and reinforce the notion that faculty become better equipped to teach in an online environment.

**Community of Inquiry**

Courses developed via the CDI were also evaluated using the CoI survey instrument to gauge whether the faculty succeeded in creating a CoI within his or her online course.

CoI refers to a model of exemplary online course design that supports higher-order learning through increased levels of engagement and interaction, specifically characterized as three types of “presence” demonstrated during the online experience: teaching, social, and cognitive.
Teaching Presence refers to the way that educators design their courses, facilitate discussion, and provide instruction. Students were asked a series of questions related to how faculty demonstrated Teaching Presence in the course and overwhelmingly agreed that the CDI faculty members demonstrated teaching presence online (Figure 6).

Social Presence refers to the creation of a mutually respectful environment where peer-to-peer and peer-to-instructor relationships can develop to communicate purposefully.

Survey results indicate that students mostly agreed with statements that correlate with the creation of social presence online (Figure 7).

Cognitive Presence refers to the way that students can construct meaning of content through sustained reflection and discourse.

Once more, survey results indicate that students agreed with statements reflecting that CDI faculty demonstrated cognitive presence online (Figure 8).

**Recommendations**

While it is clear that the CDI has significantly increased the overall capacity of faculty members to consistently develop quality online learning experiences without sacrificing student satisfaction, it is not yet clear whether online course development contributes to greater achievement of student learning outcomes. Further research is necessary to determine what effect, if any, the CDI has on improving student performance. Going forward, detailed case study descriptions of CDI courses involving a multi-method approach in which questionnaires, focus groups and interviews gathered from students and faculty members can inform ongoing improvement efforts. An exploratory approach can help to inform experimental conditions, data collection methods, research instruments and student learning outcome variables that can be woven into more rigorous research in the future. These case-study reports can also help to uncover faculty and student perceived needs within a range of online course designs.

Additionally, data gathered from the CoI survey instrument will be used to improve future iterations of courses developed via CDI, as well as improving the CDI itself. To date, the CoI survey data is not incorporated back into the course development process in a way that would enable faculty to use that data for iterative improvements.
A more formal annual review of this data with both current and past CDI faculty can help faculty better understand what improvements can be made. For instance, the data in Figure 7 indicates a decline in Social Presence being exhibited in CDI courses between the 2012 and 2013 cohorts. Analysis of this data may help indicate a reason for this decline and may provide the CDI facilitators with specific areas of improvement to address during the following CDI.

Furthermore, data on how faculty participation in the CDI effects the faculty member’s face-to-face (conventional, in-person) course may prove valuable in determining any “spillover” effects from the CDI. Further analysis is needed to determine whether the faculty have incorporated effective practices and strategies employed online into their traditional course and whether these strategies are being used effectively. Correspondingly, data on how many of the courses developed through CDI have subsequently been offered fully online in a following fall or spring semester would prove valuable when examining the long-term impact of the CDI.

**Conclusion**

For the last six years, the Course Design Institute has served as the primary incubator for fast-track online course development at SDSU and continues to equip faculty with the training and support necessary to design, develop, teach and evaluate fully online courses during the Summer Session. As a result of moving these high-demand courses online, the CDI has had a significant impact on increasing student access to courses, and addressing space constraints, with the goal of improving retention and time-to-degree rates well within sight.

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