Online and Distance Education at U-M Ann Arbor: What We Can—and Can't—Learn from U-M's Data Warehouse

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Background

In 2011, almost one-third of students enrolled in U.S. higher education were enrolled in an online course, compared with just nine percent in 2002 (Allen & Seaman, 2013). Online courses are not just offered at for-profit institutions: in 2012 approximately two-thirds of students enrolled in online courses were enrolled at not-for-profit institutions (Aslanian & Clinefelter, 2013). Although online courses are not common at U-M Ann Arbor, online courses—and even one online program—exist. In light of the wider national movement toward increasing online offerings in higher education, I sought to answer the following question: *What does U-M Ann Arbor offer in terms of online and distance education and how has this changed in the past several years*?

Data and Sample

Although the above question is difficult to answer due to limitations of the data warehouse, we can get a rough picture of where distance or online courses are offered at U-M Ann Arbor, who is taking them, and how enrollment has changed in the past several years. The data warehouse specifies the instruction mode used in each course, and "Distance" and "WWW" are listed among the mode categories. For this analysis, I used data from classes offered between 2008-2013 that were designated as "Distance" or "WWW" in the data warehouse. Two-thirds of courses in the sample are categorized as "Distance," and one-third are categorized as "WWW." It was not entirely clear what each of these designations meant or whether distinguishing between the two was meaningful (see limitations section), so I combined them into one group for this analysis. The sample includes 29 courses and 1,072 students enrolled in those courses between 2008-2013.

Which units offer distance and online courses?

Cumulative Enrollment in "WWW" or "Distance" Courses, by Unit from 2008 to 2013



Which students are taking these courses?

Cumulative Enrollment in "WWW" or "Distance" Courses, by Class Year from 2008 to 2013



What is the trend over time for distance and online courses?



Enrollment in "WWW" or "Distance" Courses, by Academic Term from 2008 to 2013

Limitations of the data

Three types of instruction modes are recorded in the database: D=Distance, P=Person, and M=Mixed. The abbreviation "WWW" is also sometimes used to indicate instruction mode. In my correspondence with the Registrar's Office, though, I learned that "There shouldn't be any WWW codes out there in the data. If there are WWW codes they should be considered a subset of Distance." Thus, although "WWW" and "Distance" are both listed as modes of instruction, there appears to be no clear or systematic difference between these categories, and it is not clear whether all "Distance" courses are delivered fully online, since a "Distance" mode of instruction could mean many things. Understanding and tracking the extent and types of online course offerings, then, becomes difficult. It may be helpful to note that this complication of unclear or inconsistent variable definitions is not unique to U-M's data warehouse; it is a known issue among institutional research offices at colleges and universities across the United States (Gagliardi & Wellman, 2014).

What else would be useful to know or study?

- The database lists the course catalog numbers, but it would be helpful to capture more information about the course. What is the nature of evaluation, pedagogical strategies and tools used (e.g., discussions, team work, assignments, type of feedback to students, etc.)?
- What sorts of challenges and supports do students experience in distance and online courses at U-M? Are these consistent with students' experiences in their on-ground courses?
- Do students perceive or experience online courses as much different than their on-ground courses that have many online components, either as required or optional components of the course?
- It may be useful to include data from U-M Flint and U-M Dearborn to look across institutional contexts at distance and online courses and which students take them.

Why would it be useful to know more about online courses at U-M?

- As more instructors and departments offer—or consider offering—online courses, they can learn from what is already being done at this university to design, support, and teach online courses.
- The debate about the quality of online education offers no clear answer, and student and instructor experiences in online courses are very context-specific. Studying outcomes and strategies used in our own university environment could be a valuable strategy for evaluating and improving online courses offered at this university. Some course-specific research is being done, such as Perry Samson's study of AOSS 102, a course that allows students to engage in class virtually using a tool Samson developed. More course-specific studies or a university-wide study of online course offerings may yield findings that could inform wider practice and future decisions about the adoption of online instruction at U-M.
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