Initial Comparator Research – Michigan

(LMS = CTools (Sakai, 10 years old) moving to Canvas Pilot (ICW Unizin) which is underway (2014-2015); MLearning LMS for the Medical School is upgrading to Saba (selection in 2013))

General Impression: The University of Michigan is bigger (twice the size), with more funding and more numerous active, digital education programs than UO, which make it a difficult institution to use as a comparison. The distribution of technology services combined with the distribution of online/innovative technology teaching, which seem to characterize the historical structure at U-M, do have some similarity to UO. IT and related support services are based within the schools and colleges, which development and run programs at quite different levels of sophistication and activity. Even the course listings are provided by school/college listings. However, recent (within 2 years) new initiatives to develop coordination and strategic planning have been instituted for digital education, for information technology, and to direct and develop innovation for the future. These latter activities would be very useful models to investigate further for consideration by UO.

1) What services does this institution's Extension unit provide to campus partners?

Continuing Education is offered through individual academic schools and colleges (Medical, Dental, Social Work, Law), rather than a single unit. The consolidation of online courses and policies provides the mechanism through which continuing education courses and programs, whether credit or non-credit, are offered (along with F2F courses at the main campus or extension sites around the state). Lifelong Learning (http://alumni.umich.edu/learning) is a program offered through the U-M Alumni Association, coordinating non-credit, continuing education, career development, individual classes, and K-12 classes. This seems to have replaced a central CE unit as a place to provide a coordinated catalog (not producing courses or programs, though).

U-M was one of the founding universities in partnership with Coursera, currently offering 17 MOOCs. U-M also recently partnered with NovoEd (https://novoed.com/), an online learning environment created to intensify student engagement by leveraging social and collaborative technologies. No classes have been offered through this company, yet.

Through campus, there are at least 6 online master degrees, at least 23 online certificates (most in Engineering through the Integrative Systems+Design program in partnership with GE and the auto industry, but also Social Work, Public Health, Nursing, and Dental Hygiene) and a sprinkling of online courses across school/college programs. There are 22 schools/colleges, course listings are divided by unit, rather than centralized.

2) Where is digital education housed? Are there separate units for online learning and blended or hybrid courses? Are technology and pedagogy combined or separate? How much of this effort is centralized?

The Office of Digital Education and Innovation (http://digitaleducation.umich.edu/) has a purpose "to redefine public residential education at a 21st century research university

through the creative use of technology and targeted experimentation with digital programs in order to enable engaged, personalized and lifelong learning…" DEI – a recent initiative from 2013 – currently acts as a coordinating body which "enables teaching and learning innovation at U-M through targeted financial support, consultative services and aligning community interests and expertise." Because some of the factors affecting digital education at U-M resemble issues at UO, the strategic and operational objectives for DEI could be quite useful and are therefore included in full:

- Our strategic objectives are to:
  - Design and build upon a loosely coupled digital ecosystem that favors content re-use, data analysis, collaboration and faculty control
  - Lead the Michigan community in defining and articulating the value of digital education and academic innovation
  - Identify uses of technology that support our community's commitment to discovery and scholarship
  - Lead in defining the value of public, residential research universities in an age of learning analytics
  - Identify uses of technology that enhance quality while driving down costs
  - Encourage the creation of new digital programs that combine multidisciplinary university strengths and address global challenges
  - Encourage experimentation that drives our university community toward personalized, engaged and lifelong learning
  - Capitalize on distributed innovation at the broader institutional level to inform strategic resource allocation
  - Encourage a culture of experimentation with digital programs and tools in alignment with institutional priorities and global challenges
- Our operational objectives are to:
  - Adopt mechanisms to facilitate partnerships among academic units and enhance operations and services in alignment with strategic aims in order to accelerate the pace of change
  - Collaborate to deploy data systems that allow U-M to track digital education programs and the impact of programs and tools on learning
  - Provide simple and efficient access to expertise throughout the teaching and learning ecosystem at U-M
  - Showcase exemplar programs and innovations and share emerging and best practices to the Michigan community and beyond
  - Encourage the creation of common policies, best practices, business processes, and support systems to minimize barriers and ease the efficient creation and operation of digital education programs and courses
- The DEI team – which include a number of faculty as full team members – helps foster development, course and program ideas, through all necessary stages, helping connect faculty with resources.
    - The team include one "innovator in residence:, directors of DEI units as well as Vice Provost and Associate Vice Provost of DEI.
    - Digital Innovation Greenhouse (http://digitaleducation.umich.edu/about/dig-digital-innovation-greenhouse/) is a testbed and development space for learning technologies. The six-person project team includes 3 faculty, which "harvests

educational software innovations" and helps the small or resource poor innovations grow.
- LED Lab (http://digitaleducation.umich.edu/about/use-lab/) is a program to facilitate learning communities (a community of scholars as they state), partnering with other learning technology groups at U-M like the Digital Media Commons, Collaborative Technologies Lab, and the UM3D Lab, and facilitate projects (there is a link to current projects), papers and presentations, and invited talks.
- There is a collaborative learning space called the Digital Education and Innovation Lab (http://digitaleducation.umich.edu/about/lab/) located just off campus, for faculty, researchers, designers, production staff, and students to create new digital programs, experiment with digital tools and platforms, explore media production capabilities and discover new pedagogical techniques.

Integrative System+Design in the College of Engineering (http://isd.engin.umich.edu/) "integrates the depth and breadth of intellectual resources of the College of Engineering and the University—art and design; business; literature, sciences and the arts; medicine; and public policy—into uncommon educational opportunities." ISD coordinates 4 online master's degrees, and 17 professional certificate programs (engineers, manufacturing, and health management) which seemed to have been developed with and for auto industry companies and GE.

Open.Michigan (http://open.umich.edu/) is an "initiative that enables faculty, students, and others to share their educational resources and research with the global learning community." It originated in the U-M Medical School in 2007 and since 2012 is housed in the Medical School Information Services unit. Resources may be research focused, but support for and useful in instruction is stressed in its vision statement.

NextGen Michigan (http://nextgen.umich.edu/) has the goal "to establish the University of Michigan as leaders and best in providing a campus IT environment that dramatically advances the university's academic, teaching, research and clinical programs. IT Rationalization will improve IT service delivery, reduce cost and repair the university's fractured infrastructure," setting a foundation for the future. The Office of the CIO (http://cio.umich.edu/) oversees Information Technology and Services (http://its.umich.edu/), NextGen, and the IT Council. ITS hosts the current LMS (CTools) and NextGen coordinates the Canvas pilot.

3) What structures, formal or informal, are in place to encourage pedagogical innovation on campus? Is there any effort to centralize such activity?

The Center for Research in Teaching and Learning (http://www.crlt.umich.edu/) has a professional staff holding PhD's in a variety of academic disciplines and is dedicated to the support and advancement of evidence-based learning and teaching practices and the professional development of all members of the campus teaching community. CRLT partners with faculty, graduate students, postdocs, and administrators to develop and sustain a University culture that values and rewards teaching, respects and supports

individual differences among learners, and creates learning environments in which diverse students and instructors can excel. CRLT provides services and support for a wide range of activity related to teaching and learning including consultation (student feedback, instructional strategies, teaching with technology, testing, etc.), training (seminars, customized workshops and retreats, for grads/post-docs, for faculty, for deans & chairs), resource information (organized by theme like teaching with technology), grants and fellowships.

- There are a 7 different funds for various purposes, with awards from $500 to $15,000 (typical seems to be $6000 (semester) or $10,000 (full year)). Funding is both pedagogical and technological innovation.
- The CRTL Theater Players (http://www.crlt.umich.edu/crltplayers) provide performances around learning, managing issues (accessibility, dealing with student mental health issues, equitable practice for tenure and promotion). They have given over 45 performances around U-M, but also at Brown University, Rochester Institute of Technology, and Georgia Institute of Technology.
- CRTL has a partnership unit in the College of Engineering (http://crlte.engin.umich.edu/), established in 2004, on north campus staffed with "engineering educators." Workshops, consultation services for faculty, administrators, and graduate students, and resource information are tailored to engineering needs. Funding of teaching grants seems to be left to the central unit.

The NextGen program is currently running, and reporting on, a Canvas LMS pilot (http://nextgen.umich.edu/lms/) in conjunction with their Unizin membership. Initial Fall 2014 pilot result details are on their website, with plans and procedures for 2015 pilot expansion detailed as well. Multiple coordinators in every school and college work to select and plan courses/instructors for pilot participation. Material discussing LMS development is provided, and connected to the IT Strategic Plan (http://cio.umich.edu/strategic-planning/).

Learning Analytics (http://digitaleducation.umich.edu/academic-impact/learning-analytics/) began in 1996 as a Data Warehouse that transition in 2009 to a lager group of faculty exploring the use of data to inform teaching learning. Initiatives include Better-than-expected/Worse-than-expected Studies, Student Learning and Analytics at Michigan, a Learning Anal;ytics task Force, and Learning Analytics Fellows (selected (funded?) faculty using data to consider how course are taught in various areas).

4) Where are instructional design and instructional technology housed? What pathways exist to guide faculty to instructional technology services? Is access to instructional technology support uniform across different faculty groups at the institution?

The schools/college which offer online programs, also seem to have (small) offices for instructional design support (Engineering, Public Health, Medicine, Education).

The largest of these, however, is the College of Literature, Science an the Arts (LSA) Instructional Support Services (ISS), which provides direct technology support (service desk, loans, classroom tech, 5 A/V editing rooms) and ISS classrooms, but also a

Learning Technologies and Consulting Group, and a Media Center. The majority of the 30+ staff are technical specialists, but there are at least three instructional technology consultants and 2 multimedia specialists.

5) At what administrative level are digital education initiatives, endorsed, supported, or made a fundraising priority? For example, does the institution count, encourage, or otherwise track student enrollment or participation in digitally-inflected (hybrid, blended, tech-enhanced F2F) courses? What institutional investments have been made in hybrid and/or blended learning?

DEI is run by the Vice Provost of Digital Education and Innovation who is also Dean of Libraries (not from a library background but formerly a CIO). This coordinating initiative was begun in 2013, DEI became active in 2014 with resources currently developing. There is a close connection between the activity of the Learning Analytics Task Force and the DEI initiative, with the former apparently providing the data and recommendations to create a program to coordinate the 'ecosystem' of learning technologies in existence across U-M. U-M is one of the founders of Unizin and this external program is clearly a mechanism for change for Michigan.

The Center for Research in Teaching and Learning, founded in 1962, is directly part of the Provost's office, reporting to the Vice Provost of DEI. CRTL probably provides most of the direct operational development support for instructional technology design.

The Vice Provost for Global and Engaged Education is on the leadership team of DEI, but has a limited number of programs as direct reports (a fellows program, military officer educations programs, and the sustainability institute).

The Office of the Provost does seem to be the center of the new efforts (there are some Provost's Initiatives mentioned in the news archive, like for flipped classroom development), but it is difficult to tell whether it is this central authority which directed the new efforts since 2013, perhaps in collaboration with CRTL and Learning Analytics Task Force, or whether the change initiative came from somewhere else (other top down authority, some external force, or some latter source.