

SUSTAINABILITY OF OER INITIATIVES

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About Me

- Brandon Muramatsu, mura@mit.edu
 - Associate Director, Projects, MIT Open Learning
- Brief background on Brandon: Involved with Open Education since 2004
 - Initially developing platform software for OpenCourseWare and courses for a university-wide OCW; nurtured OCW community and OER in higher education
 - Direct courseware development, supporting faculty, creating repositories of content and assessments, advising/starting new institutions
 - Led/leading OER initiatives in K-12 (India, Belize), Community Colleges (U.S.), 4-year Universities (U.S.)
 - My day job is large-scale, multi-year education and education technology **projects**
 - Open source assessment engine to support partially connected secondary schools (478)
 - Building a new international STEAM high school with OER at it's core; founding board member of a U.S. OER high school
 - Advising on starting new research universities, regional innovation hubs

Session Goals

- Discuss and identify areas for you to consider and explore more regarding sustainability of your OER Initiative

An OER Journey

Today

Your college or university has **just started** an OER initiative and you're getting lots of support from students!

In 2 years

You just reported that your **students have saved hundreds of thousands of dollars** on textbooks through your OER initiative!

In 5 years

Your OER initiative is at ***risk of shutting down***. What happened?

~~An~~ OER *Journey of Change*

- Today** Your college or university has **just started** an OER initiative and you're getting lots of support from students!
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- In 5 years*** Your OER initiative is at ***risk of shutting down***. What happened?

Change

- Is your OER initiative fundamentally about **change**?
 - Are you trying to convince faculty and staff from multiple units or departments to support it? <- It's a change initiative
 - Are you trying to implement OER outside of one program or department? Is it university wide? <- It's a change initiative of potentially medium or large scale
- Does your institution change bottom up or top down?
 - How does successful change happen at your institution?
 - What does this mean for the success of your initiative?
 - What leadership support do you need regardless?

Examples of change of the scale you're considering at your institution, or you've experienced?

- Development of new teaching modalities (remote synchronous)
- Gen Ed curriculum and assessment revision
- Switching to 3 campus system
- Program for academic professionals
- New internship experiences for students
- Changing large course serving thousands of students
- iPad initiative
- New union contract; institution providing service

■ Challenges

- Change fatigue
- Understanding campus culture/politics

Examples of Institutional Change at MIT related to Education

- MIT Task Forces -> Curricular Change
 - **Undergraduate Educational Commons (2004-2006)**
-> Revisions to core curriculum (GIR)
 - **Future of Education (2013-2014)**
-> Engaging MIT community with world; K-12 strategy; certification options
 - **Task Force 2021 (2020)**
-> (Not) fully online degrees

Who's responsible for success of an institutional change at your institution?

- Faculty convincing other faculty?
- Provost-led
- Faculty Senate
- Supportive administration
- Faculty-driven initiatives, but they require administrative support
- Faculty Union
- Standing committees (shared governance)
- Board of Trustees
- Communication is key

Case Study—MIT OpenCourseWare

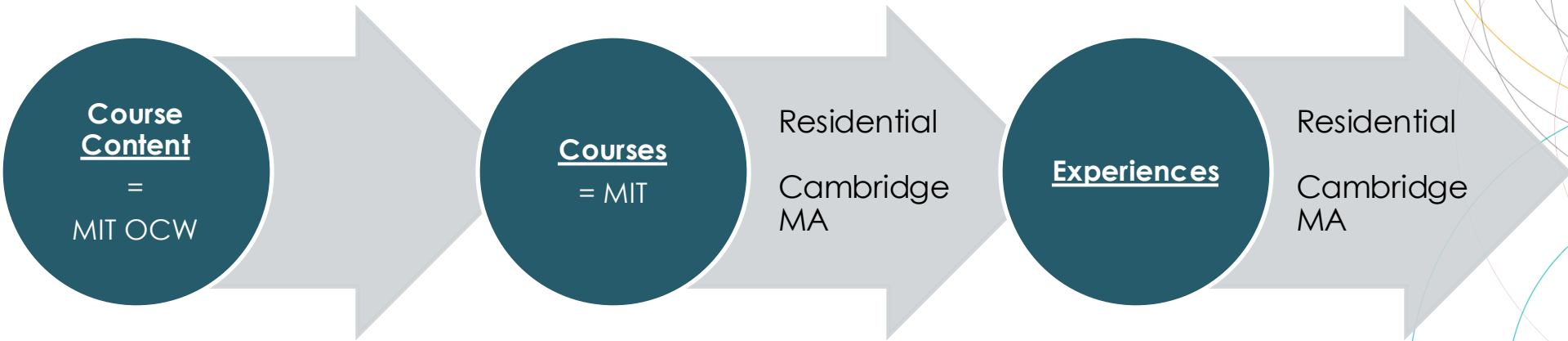
- In 2000, a MIT faculty committee was charged to develop a proposal for **financially sustainable online course dissemination**
- Era of Dot Coms; University-led Fathom, UNext, etc.
- Diverging MIT committee reports:
 - “[s]trategic themes for possible implementation. It chose the banner of lifelong learning and recommended that MIT undertake a study to launch “Knowledge Updates,” minicourses based on MIT’s strength in cutting-edge science and technology, designed for MIT alumni.”
 - Aspirations of a “unique opportunity for MIT to **exert leadership, set an example** for its peers, and make a **truly significant impact**. In contrast, the K[nowledge] U[pdate]s struck them as underwhelming.”

Case Study—MIT OpenCourseWare

- In 2000, a MIT faculty committee was charged to develop a proposal for **financially sustainable online course dissemination**
- **April 4, 2001**, MIT President Charles Vest announced that the Institute would make **course material** from **virtually all** undergraduate and graduate courses “**accessible to anyone anywhere in the world, through our OpenCourseWare initiative**”
 - Mission alignment: *The Institute is committed to generating, disseminating, and preserving knowledge, and to working with others to bring this knowledge to bear on the world’s great challenges.*

Abelson, H., Miyagawa, S. & D. Yue. (2021). On the 20th Anniversary of OpenCourseWare: How It Began. MIT Faculty Newsletter. VOL. XXXIII NO. 5. May/June 2021. Retrieved from: <https://fnl.mit.edu/may-june-2021/on-the-20th-anniversary-of-opencourseware-how-it-began/>

Elements of MIT Education Shared with the World 2000-2012



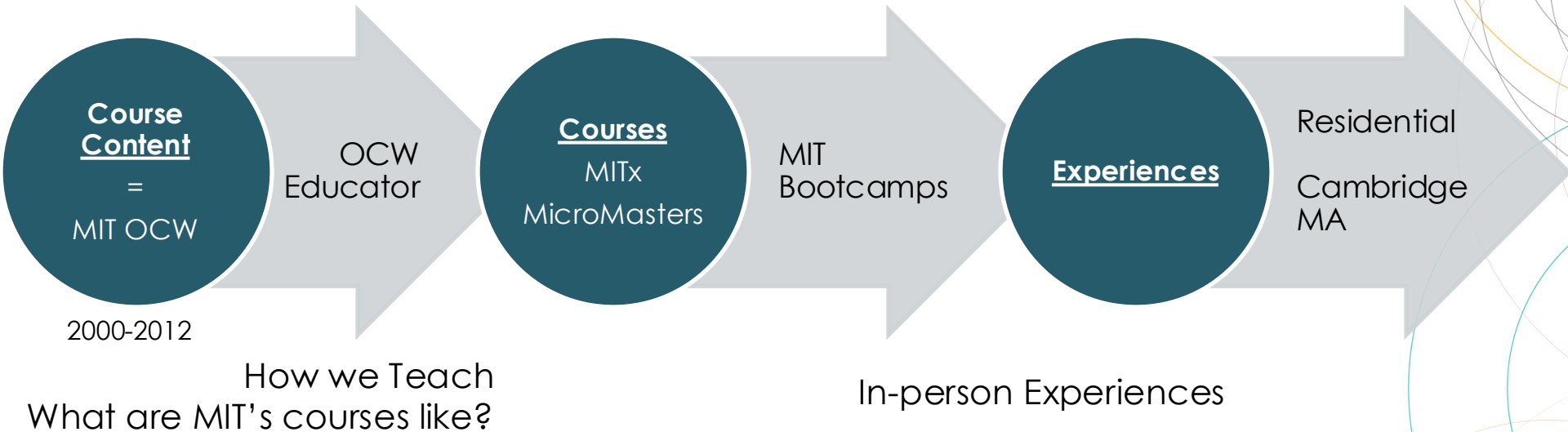
MIT OpenCourseWare

- Celebrated 20th anniversary in 2021
 - <http://web.mit.edu/webcast/ocw/1320/>
 - <https://ocw.mit.edu/about/>
- Continues to publish courses, expand use of video
- Podcast and continued insight into how MIT teaches

MIT Case Study Postscript

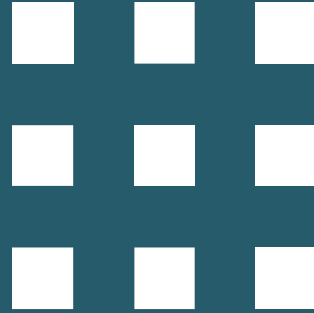
- Courses (2012)
 - MIT co-founded edX to share MITx courses with the world, not MIT degrees
- Professional Education (2016)
 - MIT invented MicroMasters® to enable learners to earn ~ 50% of a professional Master's degree via MITx MOOC courses, then apply to MIT to complete their degree (or via pathway partners)
 - MIT launched xPRO to provide professional certification programs
- MIT Bootcamps (2014)
 - MIT launched intensive 1 week entrepreneurship (and other) bootcamps

Elements of MIT Education Shared with the World 2012 to Present



MIT Case Study Postscript – Part 2

- March 2020 -> Summer 2020
 - OCW, MITx put in place key elements to allow MIT to pivot
 - Digital Learning Lab, Scientists and Fellows in many departments who had worked with faculty to offer MITx online courses
 - Some faculty with experience with online courses
 - Plus the “solve the problem” core attitude at MIT



Sustainability

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Possible Elements of Your OER Program

- Curriculum development and publishing, curation?
- Professional development?
 - Authoring
 - Pedagogy and use with students
 - Assessments
- Student involvement
 - As learners?
 - As creators?

Sustainability Issues You Might Consider

- Content
 - Static or interactive
 - Course materials, textbooks
 - Assessments
- Platform
 - Authoring
 - Use
 - Repository
- Professional Development
- Maintenance
- Funding Lifecycle & Business Model
- Student learning outcomes
- Champions, Institutional Sponsor, Labor of Love

OER: Content

- What's the existing relationship between faculty and course materials?
 - Do they author and maintain a significant portion of their own material? Or are they using primarily publisher provided materials?
- Are you focusing on open textbooks -> ZTC courses?
 - What about teacher's guides, assessments?
 - Primarily static? Interactive platforms?
- How much curricular content are you creating or using from others?
 - How often are the materials updated?
 - Who does the updating? Publisher or faculty member?
 - How often will faculty need to review the OER they use?
- Are 3rd party materials reliably accessible and stable?

OER: Courseware / Interactive Platforms

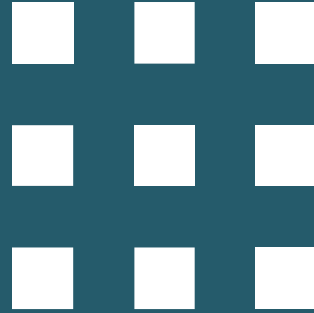
- Are you planning on using courseware or an interactive platform?
 - What happens when you change your LMS?
 - Can you migrate from the courseware to another platform? (“Standards” for this are essentially non-existent)

OER: Assessments

- Typical Quiz and Test?
- Authentic Assessment?
 - Who creates the assessments?
 - How often are they updated?
 - Migration to future platforms?

OER: Initiative Funding

- How is the initiative being funded?
 - External or internal grants or other one time funding?
What happens after the one-time funding ends?
 - Does the initiative assume or require a fundamental change in work expectations? For example, will faculty be expected to write and maintain their own course materials?



Logic Models & Theory of Change

Defining the Narrative your OER Project: How does a Logic Model help?

- ✦ Asks you to identifies assumptions ahead of time
- ✦ Asks you to state *expected* outcomes (short-term) and impact (long-term)
- ✦ Develops causal linkage between assumptions and inputs with outcomes and impact
 - ✦ Shows how what you're doing will result in what can be expected, short and long term

Logic Models Support Theory of Change

A Theory of Change explains the process of change by outlining causal linkages in an initiative, i.e., its shorter-term, intermediate, and longer-term outcomes. The identified changes are mapped – as the "outcomes pathway" – showing each outcome in logical relationship to all the others, as well as chronological flow. The links between outcomes are explained by "rationales" or statements of why one outcome is thought to be a prerequisite for another. (See Clark and Tapin)

The innovation of Theory of Change lies (1) in making the distinction between *desired* and *actual outcomes* and (2) in requiring stakeholders to *model their desired outcomes before they decide on forms of intervention* to achieve those outcomes.

Sources:

Clark, H. & D. Taplin. (2012). *Theory of Change Basics: A Primer on Theory of Change*. New York: Actknowledge.

Wikipedia contributors. (2021, April 25). Theory of change. In Wikipedia, The Free Encyclopedia. Retrieved 13:56, August 15, 2021, from https://en.wikipedia.org/w/index.php?title=Theory_of_change&oldid=1019787733

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Tool: Logic Model and its Key Elements

- Assumptions: *Beliefs we have including about our capabilities, the people and organizations involved*
- Inputs: *Resources or knowledge we bring to the project*
- Outputs: *Activities of the project*
- Outcomes: *Expected short-term results of the project*
- Impact: *Expected long-term results of the project*
- Risks

What does success look like? What does sustainability mean?