Perspectives on Scaling Quality in Online Learning:

MOOCs and Microdegrees, "Traditional" Online Courses, and Personalized Learning

Cristi Ford, Associate Vice Provost
Center for Innovation in Learning and Student Success
University of Maryland-University College

Paul Walsh, USMx Program Director
William E. Kirwan Center for Academic Innovation
University System of Maryland

Cristi D Ford

Associate Vice Provost & Director, Center for Innovation in Learning & Student Success (UMUC)

Education: Doctorate in Educational Leadership and Policy from University of Missouri

Previous positions:

- ❖ Assistant Vice Provost, Learning Innovation Initiatives
- ❖ Director, Research Academy for Integrated Learning (RAIL)
- ❖ Previous Assistant Professor, Center for Academic Technology
- ❖ Facilitate online workshops for Online Learning Consortium
- ❖ Faculty Member: Online courses in the area of Psychology & Education

UMUC

One of 12 accredited, degree-granting institutions in the University System of Maryland

Pioneer in adult and distance education

Focus on the unique educational and professional development needs of adult students

85K

More than 85,000 students worldwide

Paul Walsh

USMx Program Director, William E. Kirwan Center for Academic Innovation, USM

Education: Johns Hopkins University; Towson University

Previous positions:

- ❖ Assistant Vice President, Academic Innovation and Instructional Support
- ❖ Co-Director, Center for Excellence in Teaching, Learning, and Technology
- ❖ Director, Instructional Technology
- ❖ Director, eLearning and Training
- ❖ Program Designer
- ❖ Adjunct Faculty

UNIVERSITY SYSTEM of MARYLAND

USMx

USMx

Back to schools and partners

Free online courses from University System of Maryland

The University System of Maryland (USM) is the state of Maryland's public higher education system. Benefiting students, as well as Maryland and its citizens, USM:

- Offers expansive access to affordable, high-quality educational opportunities;
- Performs groundbreaking research;
- Instills a culture of innovation and entrepreneurship;
- Promotes economic growth and workforce development;
- Provides vital services to communities and individuals;
- And partners with business, governments, nonprofits, and other organizations to improve quality of life.

The USM consists of three Research Universities, three Historically Black Institutions, four Traditional Comprehensive Institutions, two Regional Education Centers; one Specialized Research institution, and one "Virtual" Institution specializing in online and distance education, and a system office.

USM's programs and activities have a significant impact on the quality of life in Maryland, creating social and economic benefits for people throughout the state and beyond. USM is a recognized leader in many areas, including online learning, course redesign, and other components of academic innovation.

The mission of the University System of Maryland is to improve the quality of life for the people of Maryland by providing a comprehensive range of high quality, accessible, and affordable educational opportunities; engaging in research and scholarship that expand the boundaries of current knowledge; and providing knowledge-based programs and services that are responsive to the needs of the citizens of the state and the nation. USM fulfills its mission through the effective and efficient management of its resources and the focused missions and activities of each of its component institutions.

The vision of USM is to be a preeminent system of public higher education, admired around the world for its leadership in promoting and supporting education at all levels, fostering the discovery and dissemination of knowledge for the benefit of the state and nation, and instilling in all members of its community a respect for learning, diversity, and service to others.

University System of Maryland MOOCs

Browse free online courses in a variety of subjects. University System of Maryland courses found below can be audited free or students can choose to receive a verified certificate for a small fee. Select a course to learn more.

VERIFIED
USMx
Statistical Analysis in Bioinformatics

VERIFIED
USMx
DNA Sequences: Alignments and Analysis

VERIFIED
USMx
Cloud Computing Infrastructure

2016 – 1st MOOC

2017 – 5 MicroMasters programs; 18 courses from UMUC

2018 – 1 MicroMasters, 4 Professional Certificates, and several MOOCs from multiple USM Institutions.

Over 160 thousand course enrollments

87 thousand individuals; 99.8% new to the institution.

AGENDA

The model – the artist and the team

- Developing courses – faculty and instructional designers
- Scale changes the design, the delivery, and the relationship

The application - where does this impact our approach?

- Engagement, innovation, research and data, student success, continuous improvement and redesign

The lens – Courses at-scale

- The proto/template course used multiple times
- The single-section large course

The Model

The traditional model for creating an online course is similar to how a master potter creates a new piece. This hand-crafted approach emphasizes quality and attention to detail.

Pottery

Purpose

Materials

Method

Firing

Glaze

Reheat

...sound familiar?

Each course is unique

There are thousands of *Intro to Psychology* courses online with hundreds of thousands of students enrolled.

They may share similar materials and learning outcomes when they begin the design process, but can vary considerably in delivery.

The Application

Where does this impact our approach?

- Innovation
- Engagement
- Research and data
- Student success
- Quality
- Continuous improvement and redesign

A Shared Mission

The Instructional Designer and Faculty member have a unique relationship.

It may vary from faculty member to faculty member; from designer to designer.

It also requires a certain degree of finesse.

#Inside Digital Learning

Easing Instructional Designer-Faculty Conflicts

They spend extended amounts of time together developing online courses. Sometimes, their relationship is filled with tension. Here are ways colleges and universities address and alleviate issues and promote collaboration.

By Emily Tate // May 3, 2017

1. Create a Perfect Match

2. Convince the Skeptics

3. Clarify Roles

4. Account for Time

https://www.insidehighered.com/digital-learning/article/2017/05/03/easing-conflicts-between-instructional-designers-and-faculty

Scale considerations for DESIGN

Pros with Scale:

1. Great for educational and action research
   a. Easy to create treatment and control interventions in this approach
2. Proto/template model engagement
3. Additional Benefit in evaluating specialized areas such as OERs
4. Cost Savings
5. Grading

Cons with Scale:

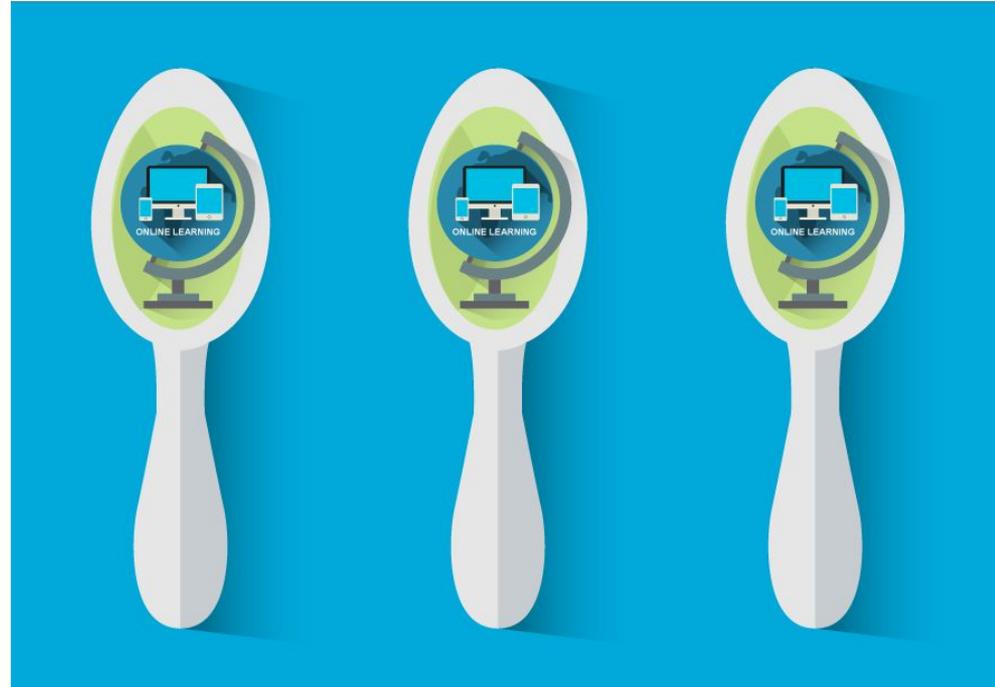1. Engagement Solutions

The Lens

Courses at-scale:

- The proto/template course used multiple times
- The single-section large course

Master Template Approach

Parent/Child Course Relationship

Standardization of Components in Course Design

The Single-section, large course

One course, large enrollment, possible multiple instructors or TAs

Top 5 MOOC Providers

coursera 27M

edX 11M

学堂在线 xuetangx.com 7M

Future Learn 6.3M

UDACITY 6M

CLASS CENTRAL

Take that to scale

A faculty member at your school is a childhood friend of Oprah Winfrey. They are going to team-teach a course online and you are the Instructional Designer.

How do you <u>scale</u> this course to have the biggest/best impact for your institution?

Taylor Branch
2013
Pulitzer Prize winning author of *America in the King Years*

Take it to Scale

For-credit and Audit options

Synchronous <u>and</u> asynchronous

Platform agnostic

Multiple Guests from the Civil Rights Era

Scale Considerations for DELIVERY

Pros with Scale:

1. Consistency for the Student in Look, Feel and Orientation
2. Create Engagement Considerations
3. Leveraging Size
4. Lessons Learned
5. Cost Savings
6. Opportunities to Identify Barriers Early

Scale Considerations for DELIVERY

Cons with Scale:

1. Resources Required to implement include IT, course developer, faculty, learning management system, server space and schedule
2. How do we measure those opportunities?
3. Personal Touch?
4. Transfer?
5. Peer to Peer interactions (Single Large course)

Take that to scale

NURSING PRACTICE
IS CHANGING.

SO ARE WE.

ANA
AMERICAN NURSES ASSOCIATION

A program chair at your institution is interested in creating better alignment with new nursing standards to a critical course. The new standards will change the delivery of a few components and must be done in 3-5 months.

How do you <u>scale</u> this course to make sure the engagement and delivery has the greatest quality?
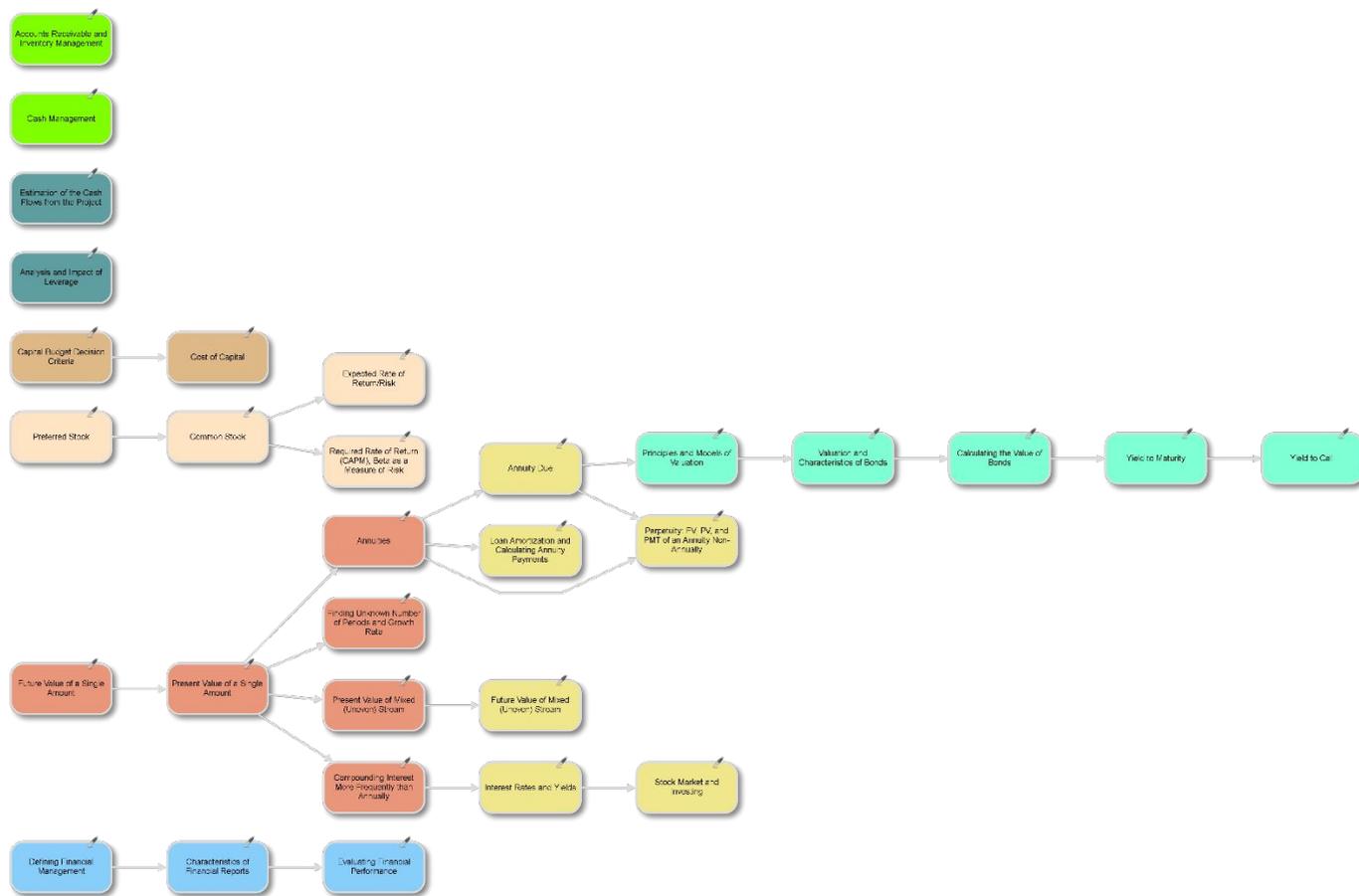
Original Design Map of a Business Finance Course

Using Data to Improve the Quality of the Design

UMUC

Finance Week 2 due by 4/21/2015

Knowledge state 99% | composite score

Actions ⌄

Steps	Progress	Advanced

83% done | **20** mins | **4/21/2015**
Progress | Estimated work to be done | Due date

💬 You have one item left to complete but the due date has passed.

💬 Please contact your instructor for the actual grade that you will be awarded for this assignment.

Next steps ▾

💬 The following steps are available for you:

Step	Item	🕐	Action
1	Practice module		**Practice**
2	Learn Finding Unknown Number of Periods and Growth Rate	20 mins	**Learn**

My learning path (showing full objective)

- Finding Unknown Number of Periods...
- Annuities
- Future Value of a Single Amount
- Present Value of a Single Amount
- Present Value of Mixed (Uneven) S...
- Compounding Interest More Frequen...

─ ✛ 1:1

Delivery At Scale
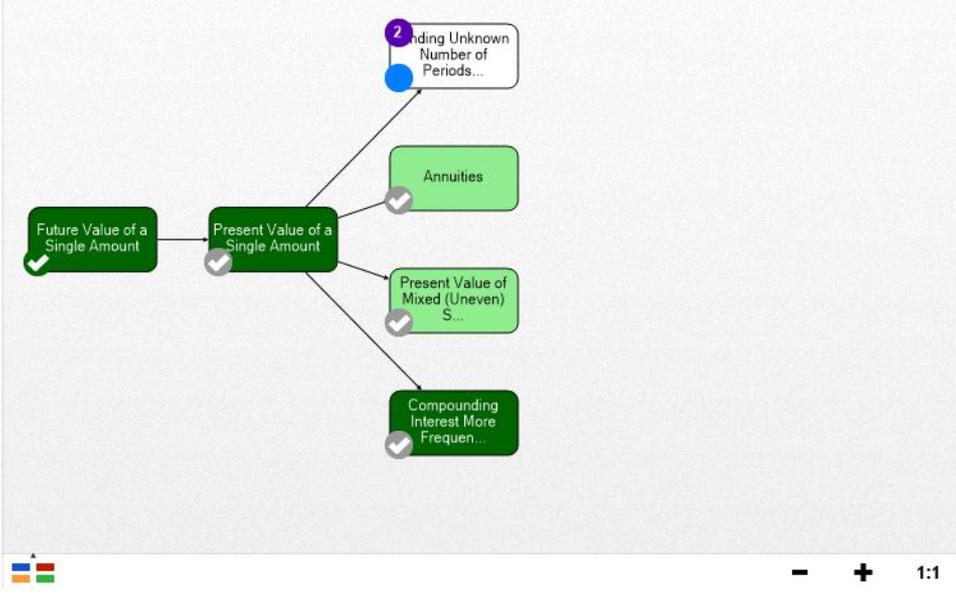
Scale Considerations for MEASURING QUALITY

Pros with Scale

1. Benchmarking is easier
2. Gain more granular details
3. More numbers with fewer variables

Scale Considerations for MEASURING QUALITY

Cons with Scale

1. Change the role of the teacher
2. Greater stakes
3. Engagement
4. Completion rates
5. Depth of response

Scale Considerations for MEASURING QUALITY

- Success Rates
- Withdrawal/Failure for non-attendance rates
- Failure rates
- Headcount
- Enrollments
- Retention
- Course Evaluations
- Faculty Feedback Survey

QM Rubric and Scale

Introduction

Learning Objectives

Assessment and Measurement

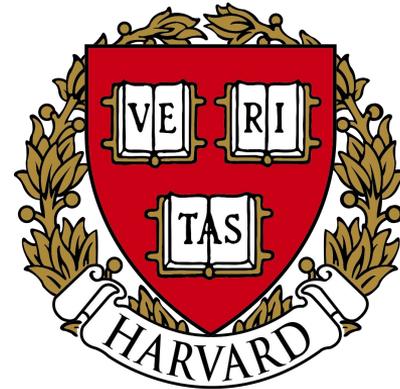Instructional Materials

Course Activities & Interaction

Course Technology

Learner Support

Accessibility & Usability

The Quality Conversation <u>changes</u> when taking courses to scale in large part because the reasoning and mission behind the course offering changes.

Why is Harvard doing MOOCs?
    Is it the same reason you would
    Do a MOOC?

HarvardX and Harvard Extension

HARVARD UNIVERSITY

HARVARD Extension School

Academics | Registration & Adr

Open Learning at Harvard

At Harvard Extension School, free and open learning is hardly a new concept. In fact, the Extension School was founded with this mission in mind: to create an affordable way for any motivated student to take courses at Harvard. We stay true to this mission today, offering several free courses and nearly 800 for-credit courses at reasonable tuition rates.

Explore our series of free or low-cost courses below. In addition, you can also browse Harvard University's Digital Learning Portal, which features online learning content from across the University, both free and fee-based options.

Video accessibility. If you are unable to easily access any of the videos below, you may submit a request for accommodation, and we will work with you on your request.

The HarvardX Mission

We have a three part mission...

- Reach: Global access
- Residential learning: Recirculation on campus
- Research: Online & offline

are informed by high-level principles...

- Impact
- Quality
- Disciplinary breadth
- Harvard rigor

and focused upon...

- Experimentation
- Iteration
- Recirculation
- Collaboration

What is your Mission?

How do you measure success in a MOOC?

Enrollment

Exposure

Research

Access

Enhance Teaching and Learning

Connection to your Identity

Scale Considerations for CONTINUOUS IMPROVEMENT

Pros for Scale

1. Utilizing Innovations to improve our analytic opportunities
2. Leverage larger frameworks to find opportunities
   a. Finding new opportunities for feedback looping
3. More diverse ideas

Scale Considerations for CONTINUOUS IMPROVEMENT

Cons for Scale

1. Considerations for continuous improvement may be slow given the input from several stakeholders
2. Will require a change management strategy to do this in a sustainable way.
3. May cause those charged with the work to be faced with resistance.

Take that to scale

Continuous Quality Improvement

Plan
Measure
Analyze
Improve
Repeat

Your five year program review is coming up and the Dean wants you to include data and insights from the online program that has been running for the past two years.

As you sit with your the instructional design team, what new data points might you be able to include in the upcoming review?

Final Thoughts

Some lessons learned on Scale

- Have a strategy that includes your institutional plan

- Take alternative credentials seriously

- Responsibilities in the Course Team need definition

- Plan for Data-informed Redesign

- Share the take-a-ways

Thank you

Cristi Ford
cristi.ford@umuc.edu

Paul Walsh
pwalsh@usmd.edu