Adapting for Learners' Cultural Diversity in Open Courses: MOOC Instructors'

Efforts at Personalized Learning Environments

#### **Abstract**

This mixed methods study investigates the tools and techniques massive open online courses (MOOCs) instructors used to reshape the learning environment for cultural diversity and learner personalization. Leveraging a grounded theory approach the researchers analyzed 19 email interviews from MOOC and distance education leaders supplemented by 28 archival, participant-written case descriptions. Leading to the analysis and formation of an online questionnaire, which was completed by 134 MOOC instructors. While most of instructors did not understand complex issues of cultural diversity, most made attempts to modify their instructional practices to accommodate cultural variances. A majority of the instructors favored collaborative, small group learning; however the instructors

during course design<sup>1</sup> and implementation<sup>2</sup> Instructors overlook culture when designing MOOCs<sup>3</sup> could not agree on best practices to establish these groups. What does personalization mean? Method Areas of Inquiry **MOOC** Instructors (15-45 minutes) Researchers 8 optional narrative How are MOOC instructors and Asynchronous forums Thematic instructional designers creating a "The process by which analysis Timely communication Relevant examples learning environment that MOOCs instructors adapt Extra resources accommodates for cultural diversity? their course and teaching Self-paced videos **IOOC Instructor** to meet students' What personalization practices do A team of MOOC instructors Online Expert Interviews individual learning MOOC instructors utilize to enrich the Interviews Learner based forums (and (underway) (n=162)other activities  $n \sim 15-20$ virtual classroom experience of its needs." Learner-to-learner diverse adult learners? interactions Deployed to~1K MOOC Other Open coding ■ Low (1-3) ■ Mid. (4-7) ■ High (8-10) Blended **MOOC Format** paced Survey mean ~ 4.54 Rate prior experience teaching Demographics fully online or blended courses Class Sizes **Participant** Instructor led driven None 1 Instructor led w/help Urban Studies Physical Science 2 19 ■ Less than 10,000 Museum Studies **1**0,000-25,000 Medicine & Nursing 20 **25,001-50,000** Law **50,001-100,000** Number 17 Language Studies ■ More than 100,000 **MOOCs Completed** Generalist **Previous MOOC Teaching Experience** 24% Computer Science Business Biology References . Such as: Ahn, et al., 2015; McAuley et al., 2010; Ostashewski & Reid, 2012 Art & Music 2. Such as: Fini, 2009; Schulze, 2014; Siemens, 2012; Speece, 2012

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A call for MOOC

instructors to

accommodate

for learners'

3. Subramony, 2004

## MOOC Instructors Interpretations of Cultural Diversity

"We used Google Translate"

Instructor-to-Participant

- "Discuss cultural differences"
- "Encouraged participants to develop/share content about their own experiences"
- "...It's a primary concern throughout"
- "A FAcebook group started to translate materials"

Participant-to-Participant

"[showed] videos"

Course Timeline

MOOC Structu

Personalization

for Participant

Motivation

- "Transcripts and closed captioning provided"
- "Include content from other cultures and places"
- "Consider...design of assignments and encourage sharing of diverse examples from different countries on discussion form"

### mean ~ 5.64 ■ Low (1-3) ■ Mid. (4-7) ■ High (8-10)

Najia Sabir @ Indiana University – Bloomington

Dr. Mimi Miyoung Lee @ University of Houston

Mobile Learning

Open Resources

empowerment by

use of learner

choice (multiple

pathways)

Addressing cultural and linguistic

differences of MOOC learners

Meeting unique learner needs during MOOC "delivery" phase

Meeting unique learner needs during

MOOC "design" phase

Meina Zhu @ Indiana University – Bloomington

Shuya Xu @ Indiana University – Bloomington

Hyper- or multi-

analysis from the online

and technology access.

Student empowerment

by use of student

created material

Accommodating for cultural

diversity

empowerment by

use of learner choice

optional activities

mean ~ 5.27

mean ~ 5.53

Dr. Curtis J Bonk @ Indiana University – Bloomington

Dr. Minkyoung Kim @ Indiana University & Boise State University

(of Student

Transcription

Instructor's

Reflection

Reflection

Findings

Participant Selfreflection

descriptions: MOOC structure

and progress; reflective practices

and individualized learning

instructional practices.

### Cultural Diversity $\neq$ Linguistic Diversity

Nearly all MOOC Instructors in our sample liked the idea of addressing culture

- Many claimed to do it
- When asked what steps they took they were not able to describe "how" they addressed

Further research is needed to determine where diversity is reflected upon?

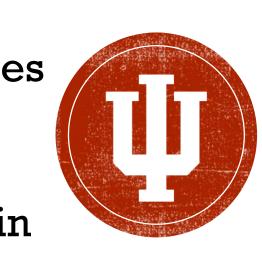
- Before the MOOC is taught

A need to investigate the relationship between a participants country of origin and language...and culture?

culture (often centering on issues of language competencies)



- Just in time teaching strategies
- Post MOOC reflection



# Changing language

Supplementary transcripts for

Sensitive about language and gestures used (n=69)

Common Design & Instruction Practices

videos/audio (n=88) or additional

material to supplement activities

- Simplify the language used (n=56)
- Slowing the pace of speech (n=49)

Altering MOOC navigation and content (n=36)