MOOC Learner Motivation and Course Completion Rates

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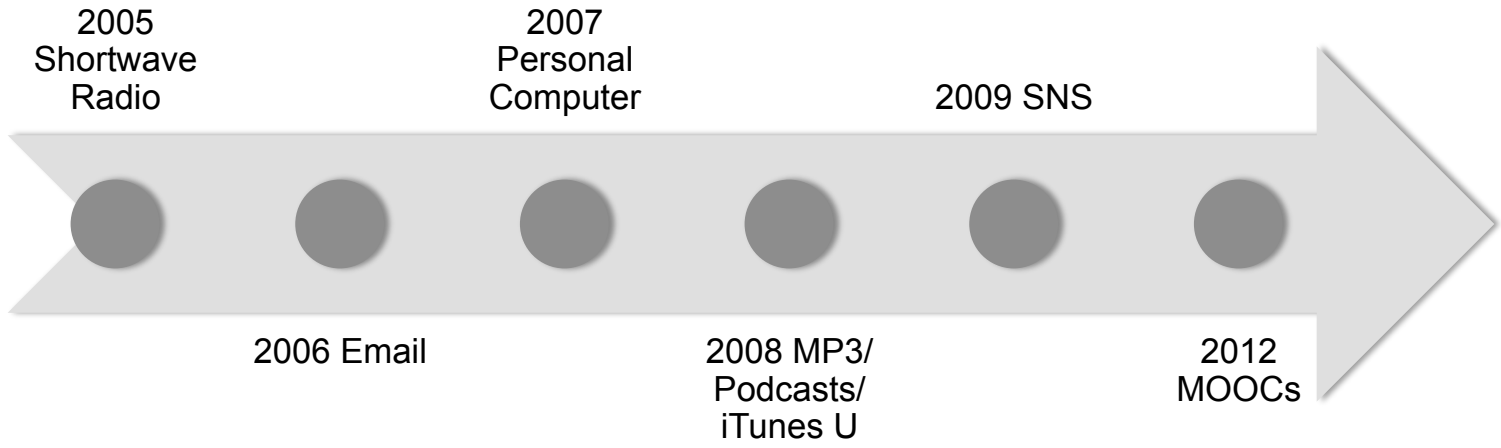
OUTLINE

- **Background**
- **Literature Review**
- **Research question**
- **Data Source**
  - U.S.
  - China
- **Work in progress**

PERSONAL BACKGROUND

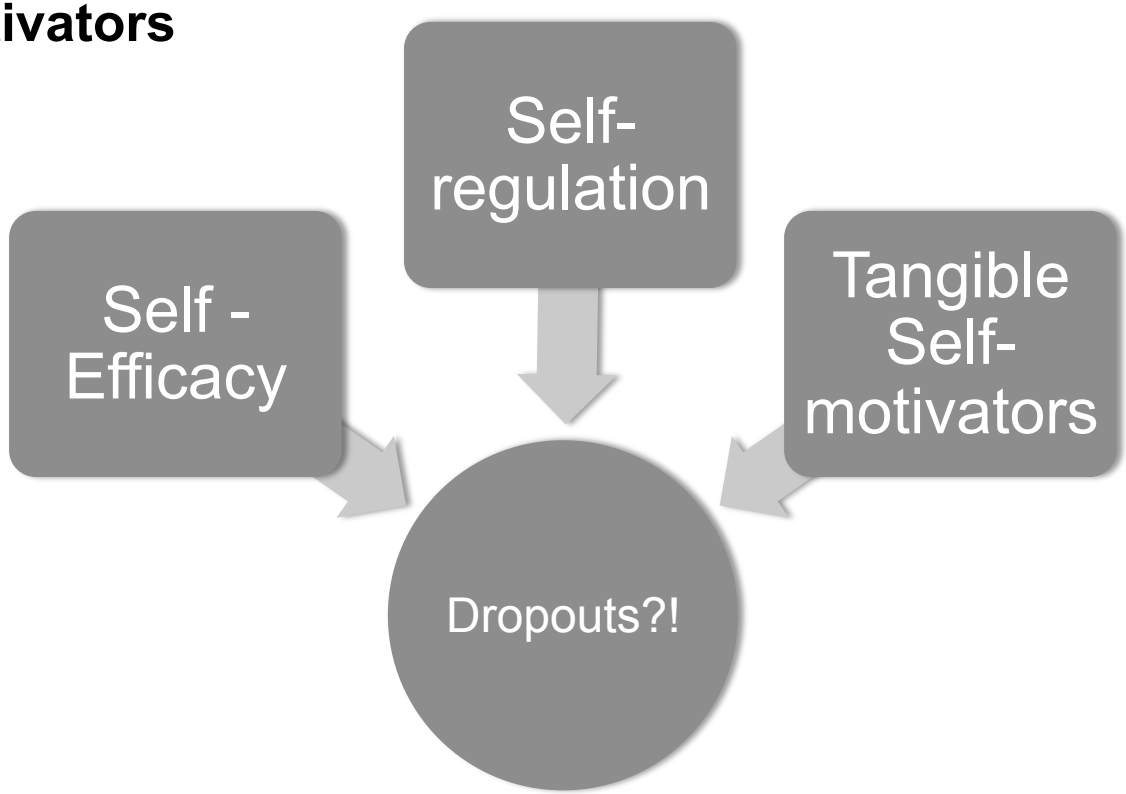
- **My Time Machine**
- **Maanshan to Manhattan (2005 ~ 2009)**



A SOCIAL COGNITIVE PERSPECTIVE

1. **Self-efficacy**
2. **Self-regulation**
3. **Tangible Self-motivators**

(Bandura, 1986)



VARIED MOTIVATIONAL ASPECTS

One the one hand, MOOC students have demonstrated varied motivational aspects. Among others,

- **Connectivism (Siemens, 2005) underscoring network-based pedagogy illustrates emergent traits of MOOCs and that MOOC learners exhibited learning goals far from utilitarian (Siemens, 2006).**
- **(Kizilcec, Piech, & Schneider, 2013) introduced a classification method grouping MOOC learners by engagement levels.**
- **The "funnel of participation" proposed by Clow (2013) for MOOCs further confirmed the challenges of catering to varied needs of MOOC participants with current MOOC models.**

COURSE COMPLETION RATES

- One the other hand, a high MOOC student dropout rate, albeit not unanimously voted positive or negative, has been identified by both researchers in academia and investigators from news media (e.g., Anderson, 2013; Carr, 2012; DeWaard, et al.; Knox, et al.; Pappano, 2012).
- Incidentally, doubts have been casted upon whether completing the course assignments is necessary for MOOC participants (e.g., Fini, 2009; McAuley, Stewart, Siemens & Cormier, 2010).
- As Anderson (2013) pointed out, many MOOC participants enroll in courses only to satisfy their initial curiosities with no intention of completing the course.

RESEARCH QUESTION

How various motivational aspects of MOOC learners correspond with degrees of course completion?

How can we define "success" for MOOC learners in general and for different subgroups?

SURVEY (2-1)

Subscales of PALS (Midgley, et al., 2000) measuring

- **Mastery goal orientation**
- **Academic efficacy**

PALS SUBSCALES CONSIDERED

PALS: Patterns of Adaptive Learning Scales

Personal Achievement Goal Orientation (PALS1), including mastery goal orientation (all five items)

9. It's important to me that I learn a lot of new concepts this year.
25. One of my goals in class is to learn as much as I can.
29. One of my goals is to master a lot of new skills this year.
38. It's important to me that I thoroughly understand my class work.
49. It's important to me that I improve my skills this year.

Academic-Related Perceptions, Beliefs, and Strategies (PALS4), including academic efficacy (all five items)

1. I'm certain I can master the skills taught in class this year.
11. I'm certain I can figure out how to do the most difficult class work.
52. I can do almost all the work in class if I don't give up.
56. Even if the work is hard, I can learn it.
58. I can do even the hardest work in this class if I try.

SURVEY (2-2)

- **MOOC-specific motivational items including those tested by existing MOOC studies (e.g., Belanger & Thornton, 2013; MOOC @ Edinburgh, 2013)**
  - "The entertainment value of the course" (Breslow, Pritchard, Deboer, Stump, Ho, & Seaton, 2013)

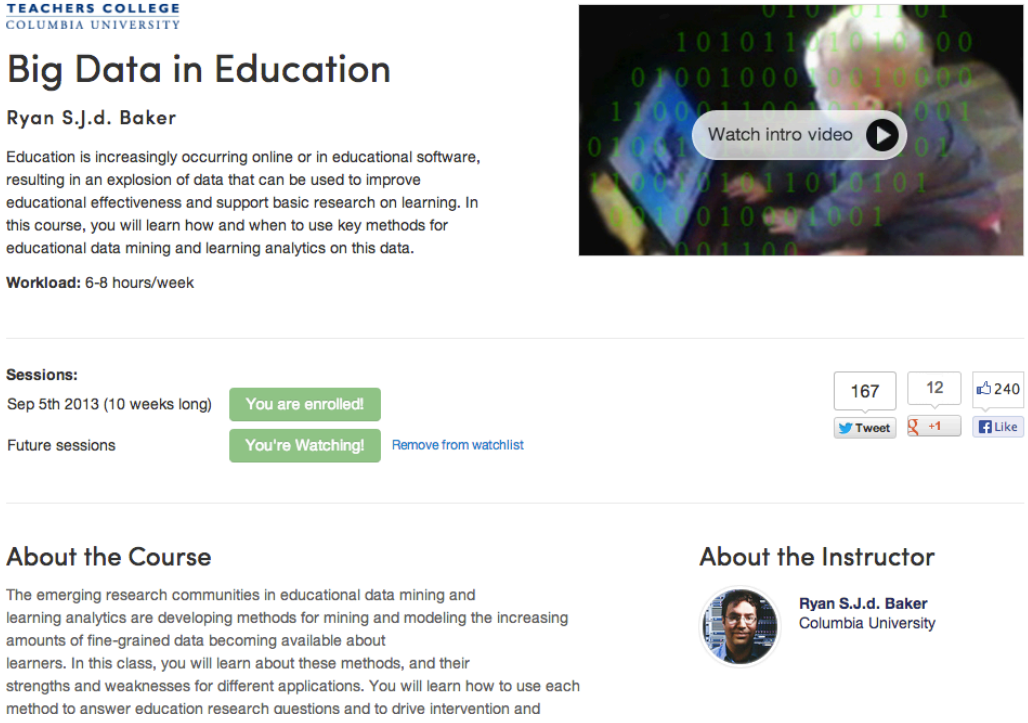
MOOC-RELATED ITEMS

- Think the course will be fun and enjoyable (1)
- Subject relevant to my academic field of study (2)
- Class teaches Skill that will help my job/career (3)
- Course is offered by a prestigious university (4)
- Curious to take an online course (5)
- Want a credential to enhance my CV/resume (6)
- Supplement other college/university class (7)
- Extending current knowledge of the topic (8)
- Geographically isolated from educational institutions (9)
- Cannot afford to pursue a formal education (10)
- General interest in the topic (11)

DATA SOURCE – U.S.

Name: Big Data in Education

Intended audience: graduate-level or with relevant professional background



DATA SOURCE - CHINA

MOOCs offered in non English-speaking regions:

AN 'EXPERIMENT' WITH …

A Psuedo-MOOC

Pre-set cap: 50

N total = 92
N TA = 2
N Student = 90

Total views/hits: 9390
(November, 2012 ~ March, 2013)

Time: 60 minutes
Topic: Creative Thinking

ADDITIONAL QUESTIONS:

What's next?

Survey design?

What kind of intervention is possible?

Cross-disciplinary comparison?

Cross-cultural comparison?

How much do cultural differences come into play?

A standard of “Getting MOOC Data?” and also “IRB process”?

Thank you!

Time for questions!

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