

MOOC on MOOC



Architecture of a MOOC: Flipped Classroom

MOOC4D

massive open online courses
for development

Technology in Education

- MOOCs are technology intensive
- Designed for 'Large Scale' use
- Can we use these technologies in the small?

Opportunity

- Use the recorded lessons in traditional classroom settings
- Student learn part of the curriculum from online lectures
- Blended Learning!

Flipped class room

- One form of blended learning
- Reverse the lectures and 'homework' times
- Listen to lectures at home
- Problem solving and discussions in the class

What happens in a Flipped classroom?

- Students view a small number of online lectures at home
- Might take online quizzes to test the learning
- Can re-run the videos if they have not understood
- Class room is used for discussion, clarification, problem solving, monitoring progress

Essentially

- Exposed to the material at home, instead of class: watch videos, interactive exercises
- Deepen the understanding in the class instead of home: exercises, discussion
- Conceptual understanding / procedural fluency

“Flipped Learning”

“Flipped Learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter.”

Flipped learning Network <http://www.flippedlearning.org>

How does it help?

- Students can watch the videos multiple times
- Every F-to-F class becomes a tutorial
- Students can solve problems together, under guidance
- Instructor knows immediately where the difficulties are

What are the problems?

- Lot of work for the instructor – designing, recording
- New skills needed
- Students may not watch lectures at home
 - Incentives for watching the video
- Internet access needed at home
- Students may want face-to-face lectures

What do you need?

- Tools to record lectures
- Platforms to host lectures, Management

Implications?

- Teachers become facilitators instead of lecturers
- Students no longer passive listeners to a lecture
- Become active participants
- Activities can energize the class and teach new skills like collaboration and cooperative problem solving

Does it work

- Yes
- Georgia Tech, Texas A&M, UBC,.....
- As much as 20% improvement in grades
- IITK experiments
 - Students with backlogs
 - Post graduate students

References

Classroom Goes

Digital <http://www.nytimes.com/2012/06/25/us/25iht-eduinside25.html>

The Flipped classroom FAQ

<http://www.cirtl.net/node/7788>

Thank You