Massive open online courses (MOOC s) ed edX. Alcune riflessioni sul futuro dell'educazione ispirate dall'insegnamento della fisica

Seminario di Formazione
AULA 3.0
UNA POSSIBILE RISPOSTA
ALLA SCUOLA DEL FUTURO
May 28-29,2013

Dr. Peter Dourmashkin
Physics Department MIT
padour@mit.edu

EdX: Motivation

EdX was created for students and institutions that seek to transform themselves through cutting-edge technologies, innovative pedagogy, and rigorous courses.

EdX Goals

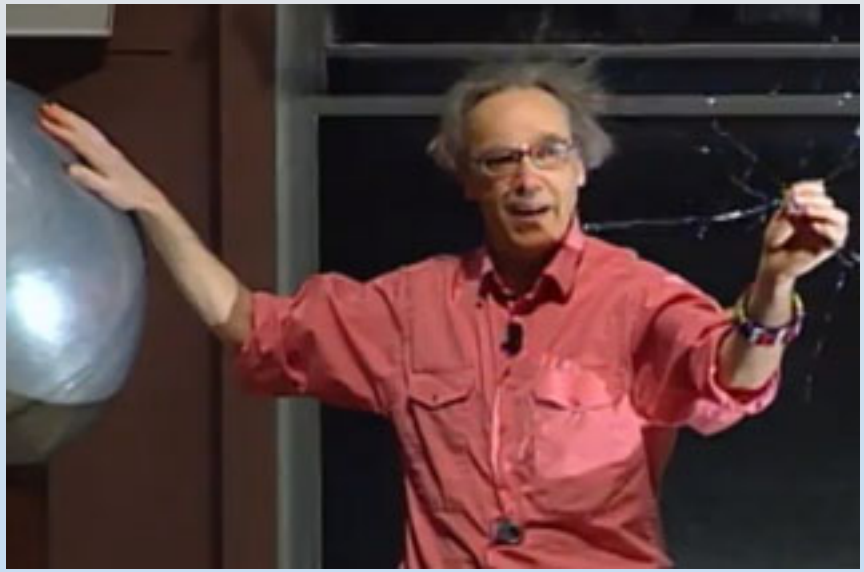
- Expand access to education for everyone
- Enhance teaching and learning on campus and online
- Advance teaching and learning through research

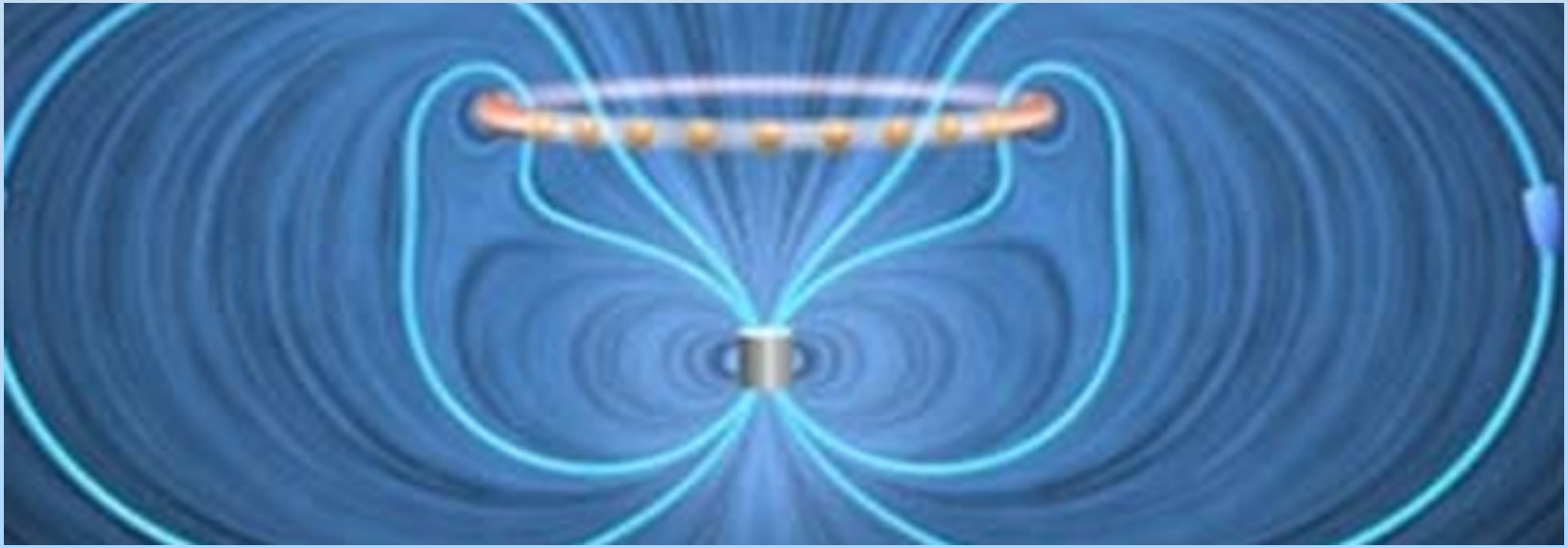
Xconsortium: Participating Universities

MITx Goals

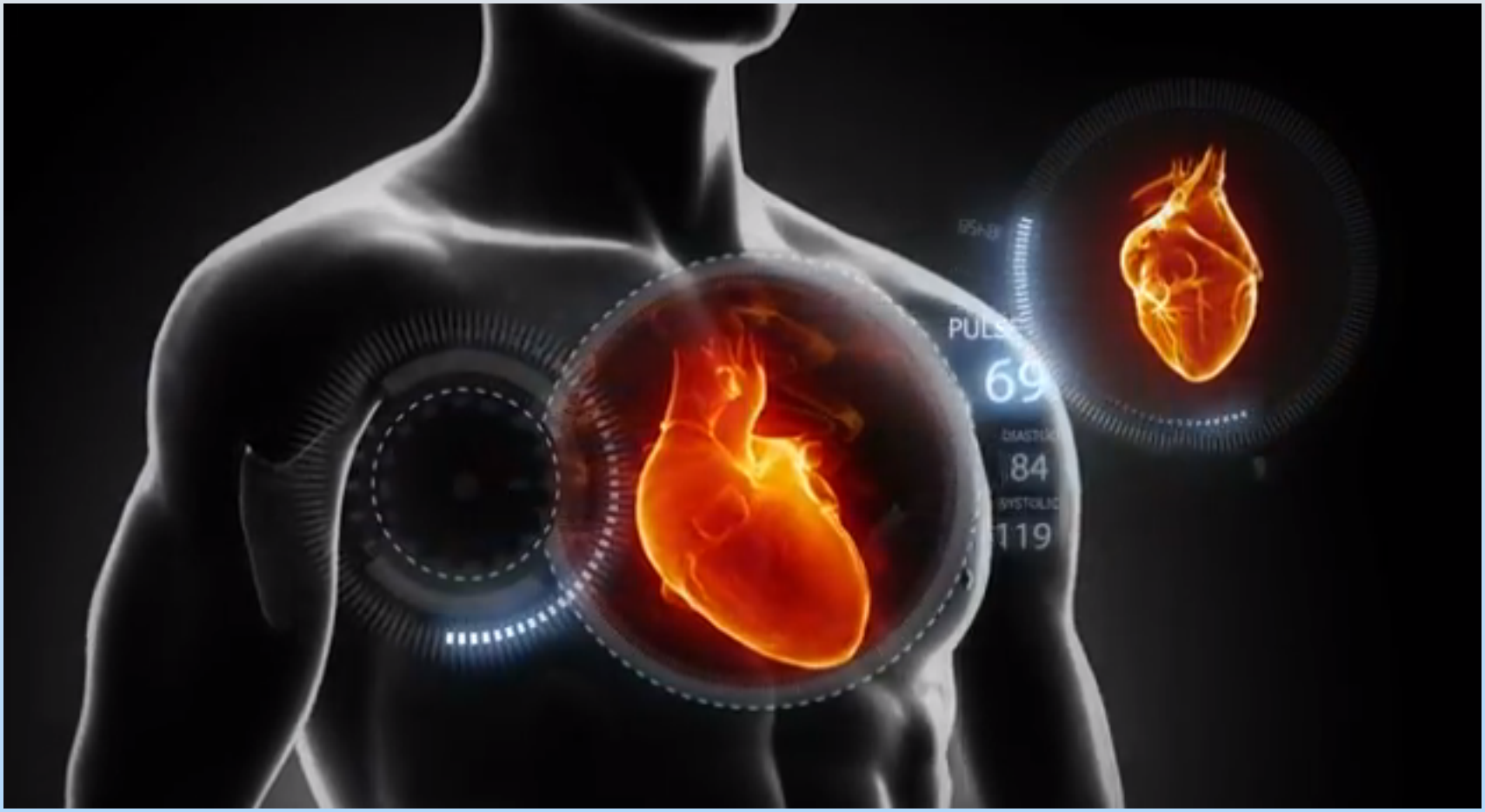
- Support the use of digital learning tools and techniques in the delivery of MIT residential programs
- Support the development of free, openly licensed, scalable, MIT-quality courses to academically talented and well prepared learners worldwide on the EdX platform
- Further the understanding of best practices in emerging digital and scalable learning environments.

8.02x Electricity and Magnetism



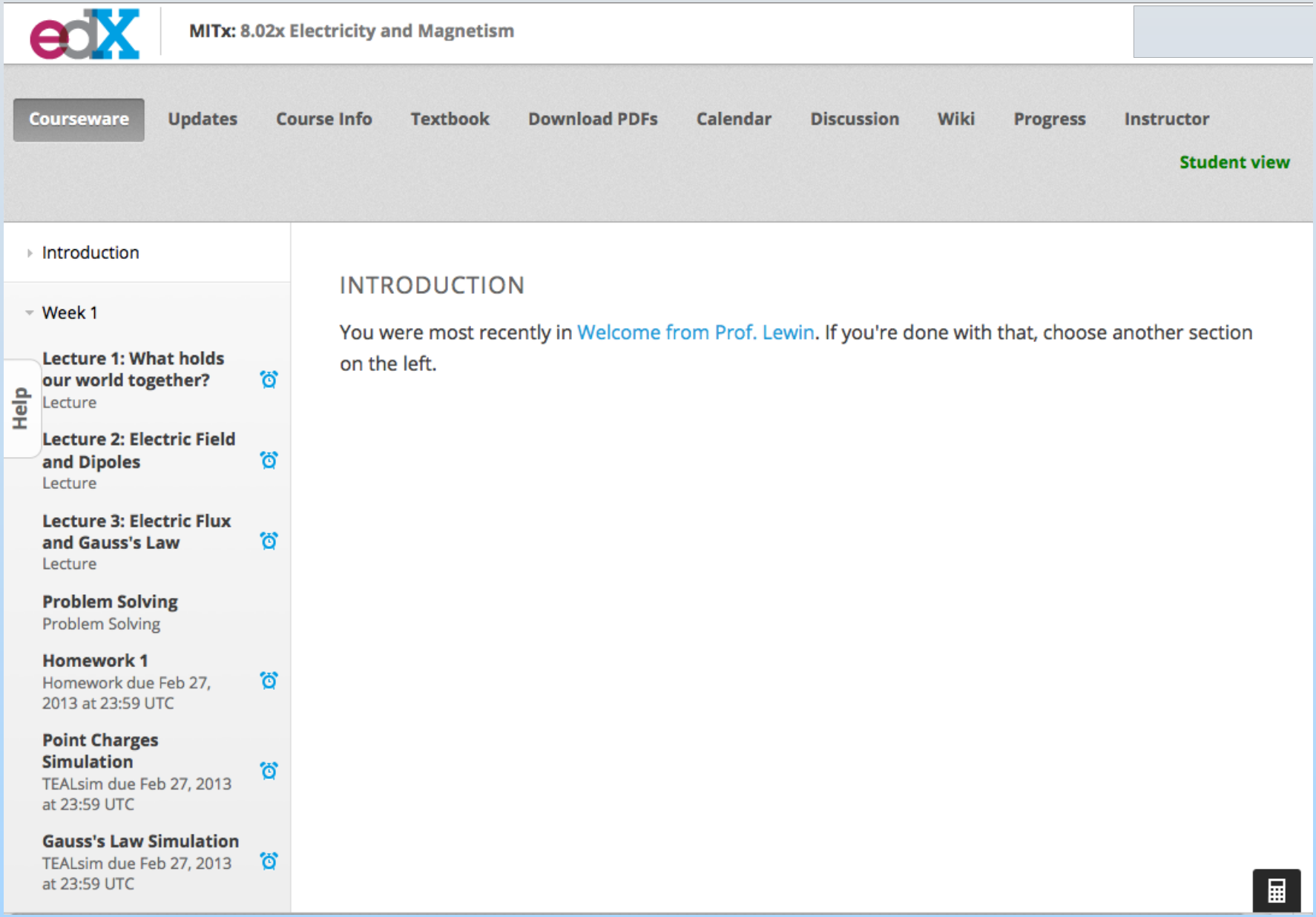


Walter Lewin Introductory Video

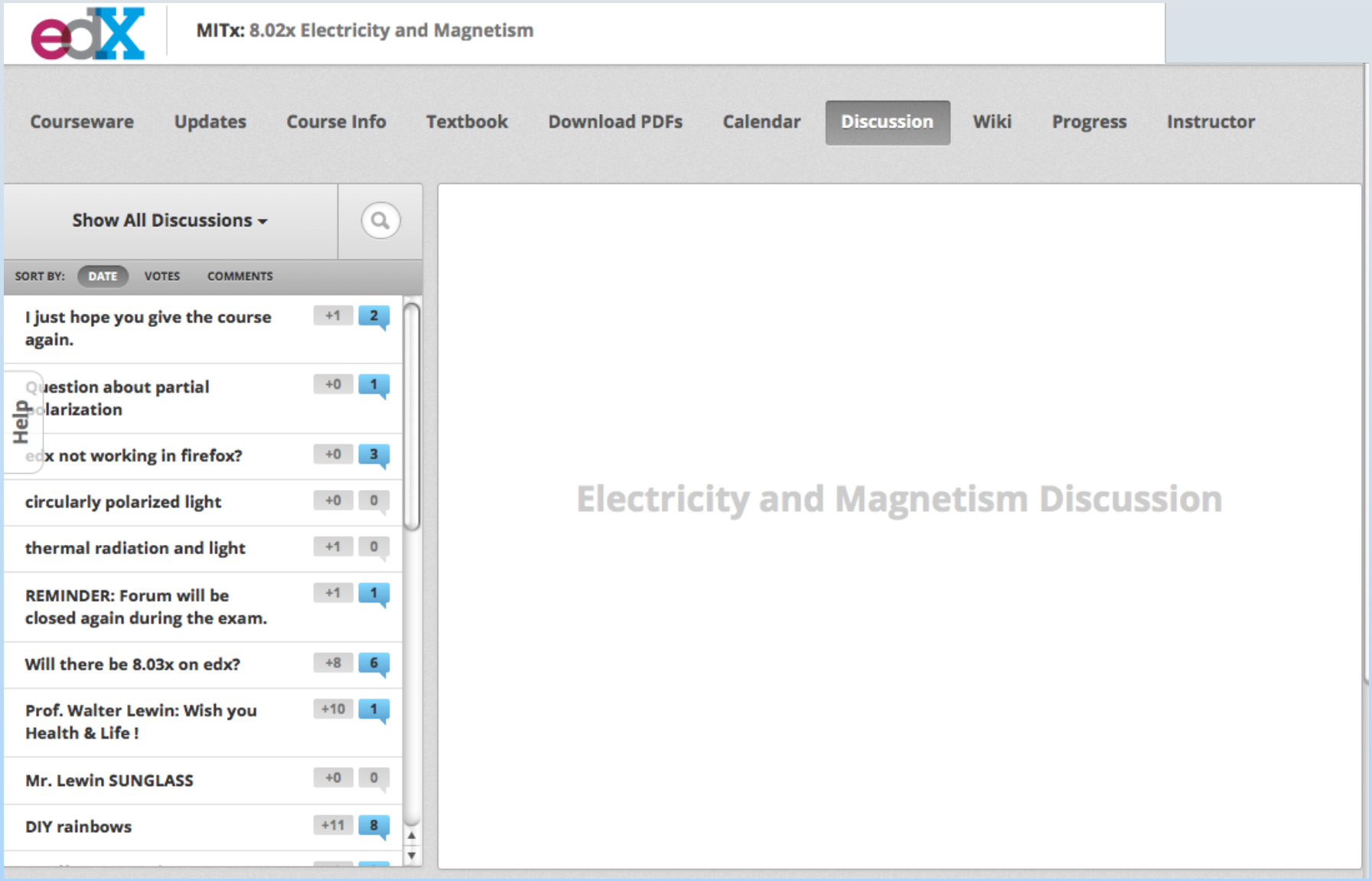


http://www.youtube.com/watch?v=BxSLwndRNDI

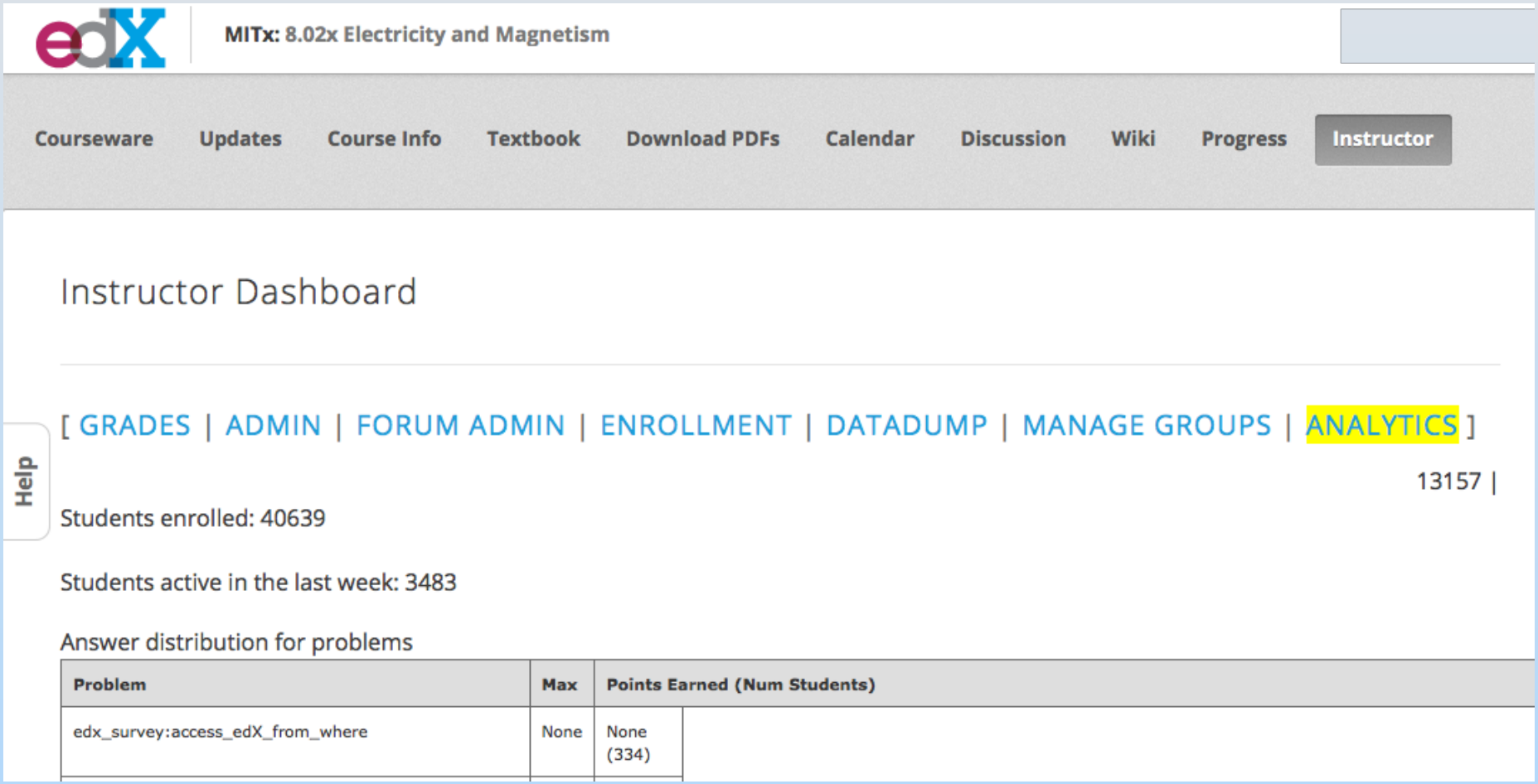
8.02X Platform



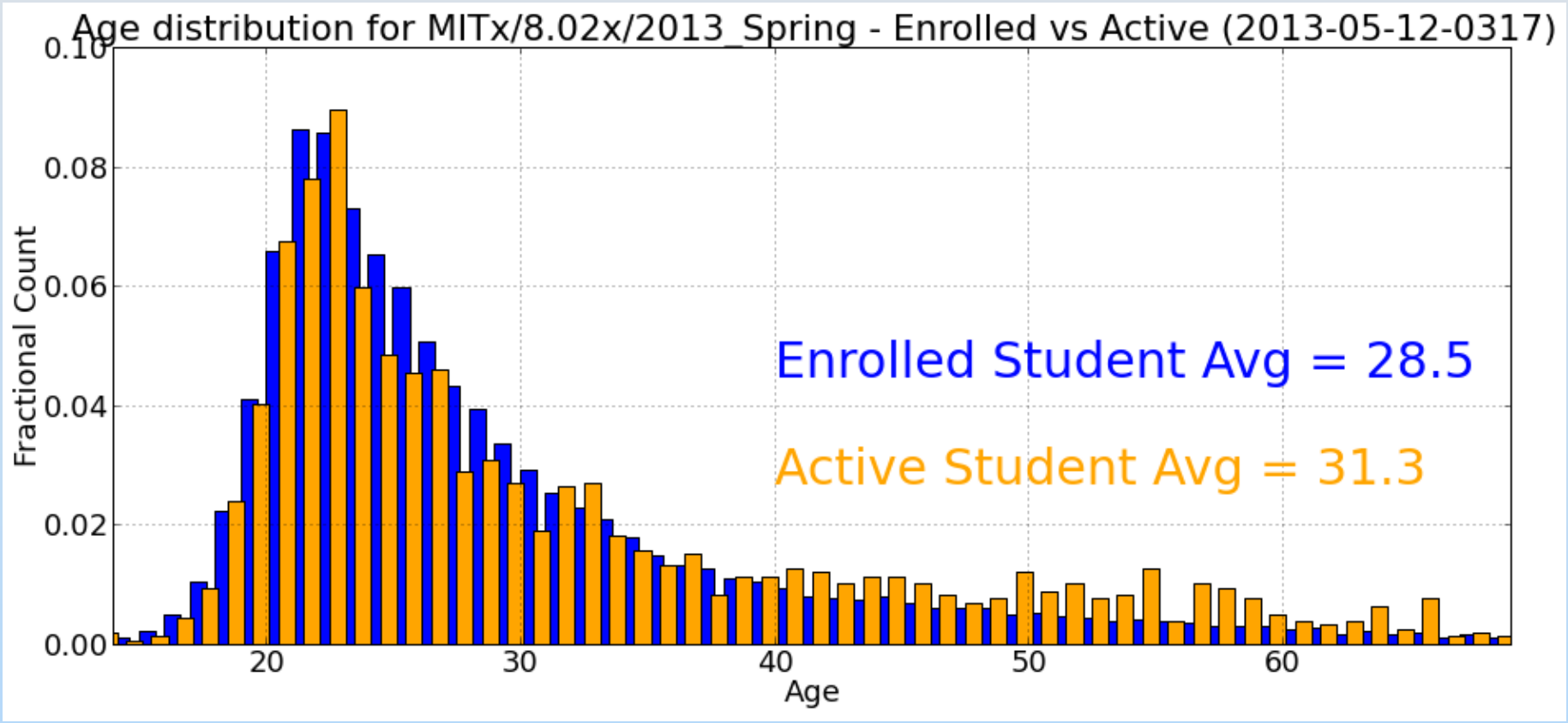
8.02X Discussion Forum



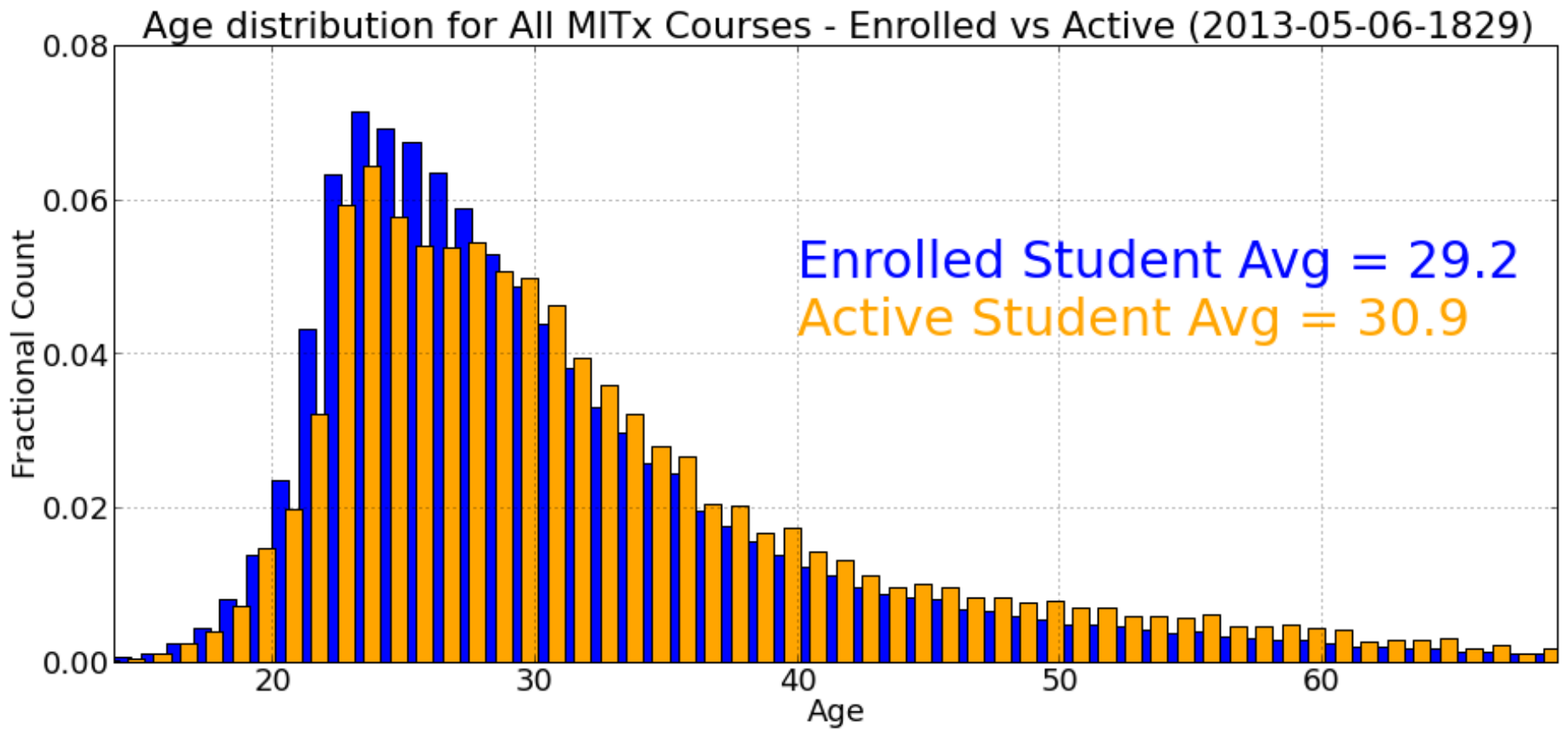
8.02X Platform: Analytics



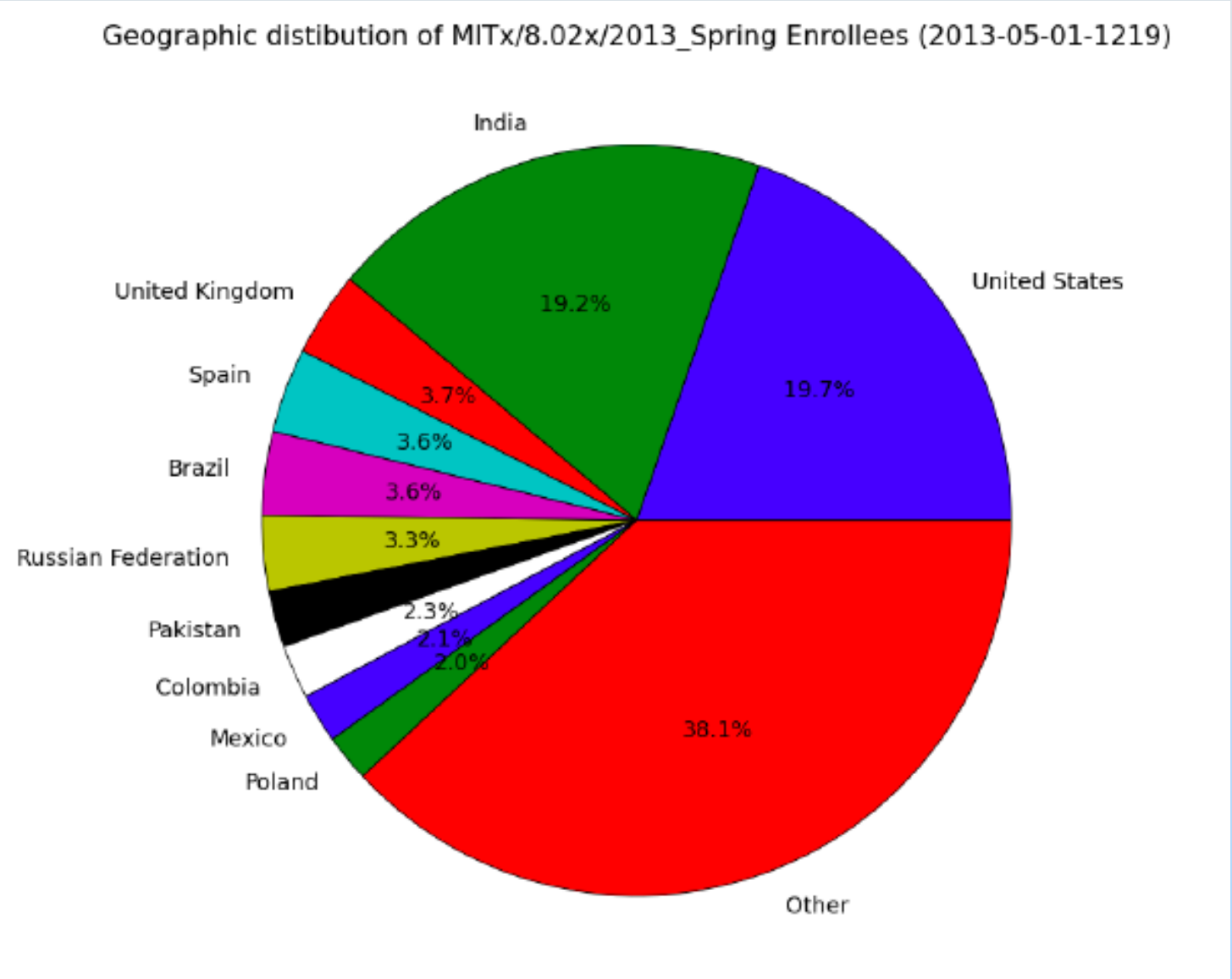
8.02x Particpants Age Distribution



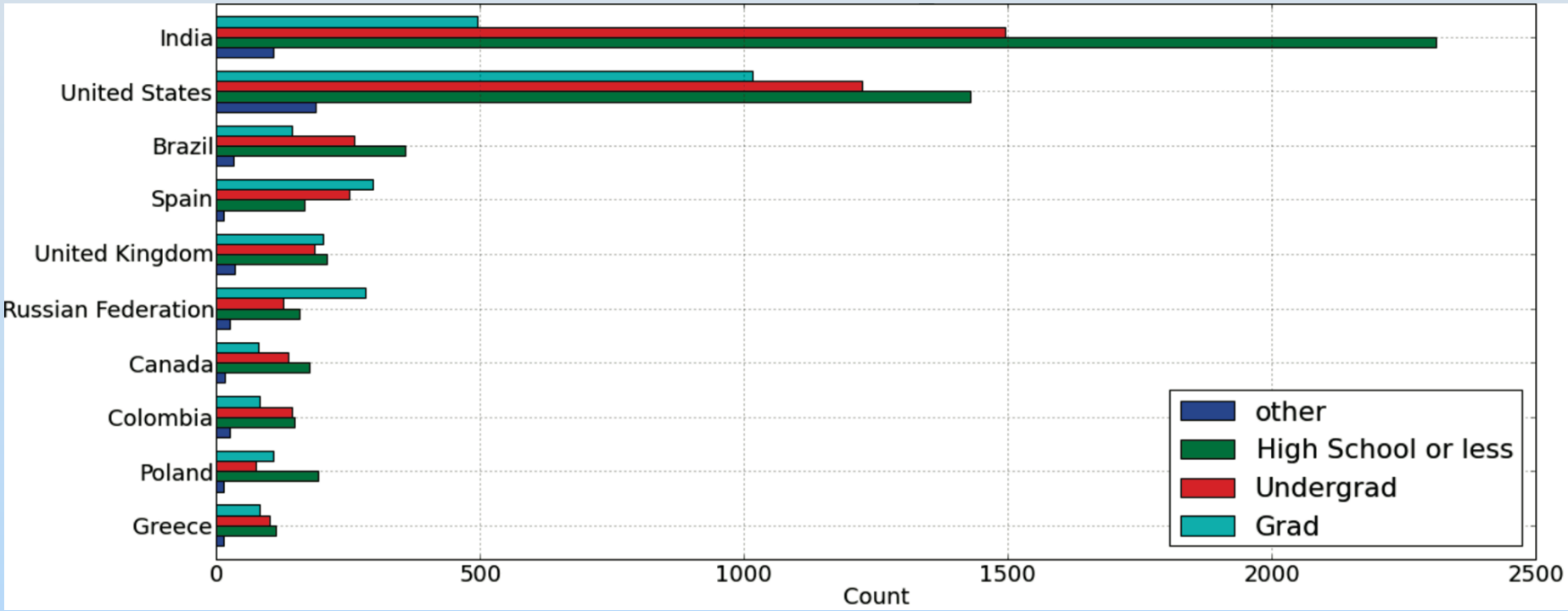
Age Distribution for all MITx Courses



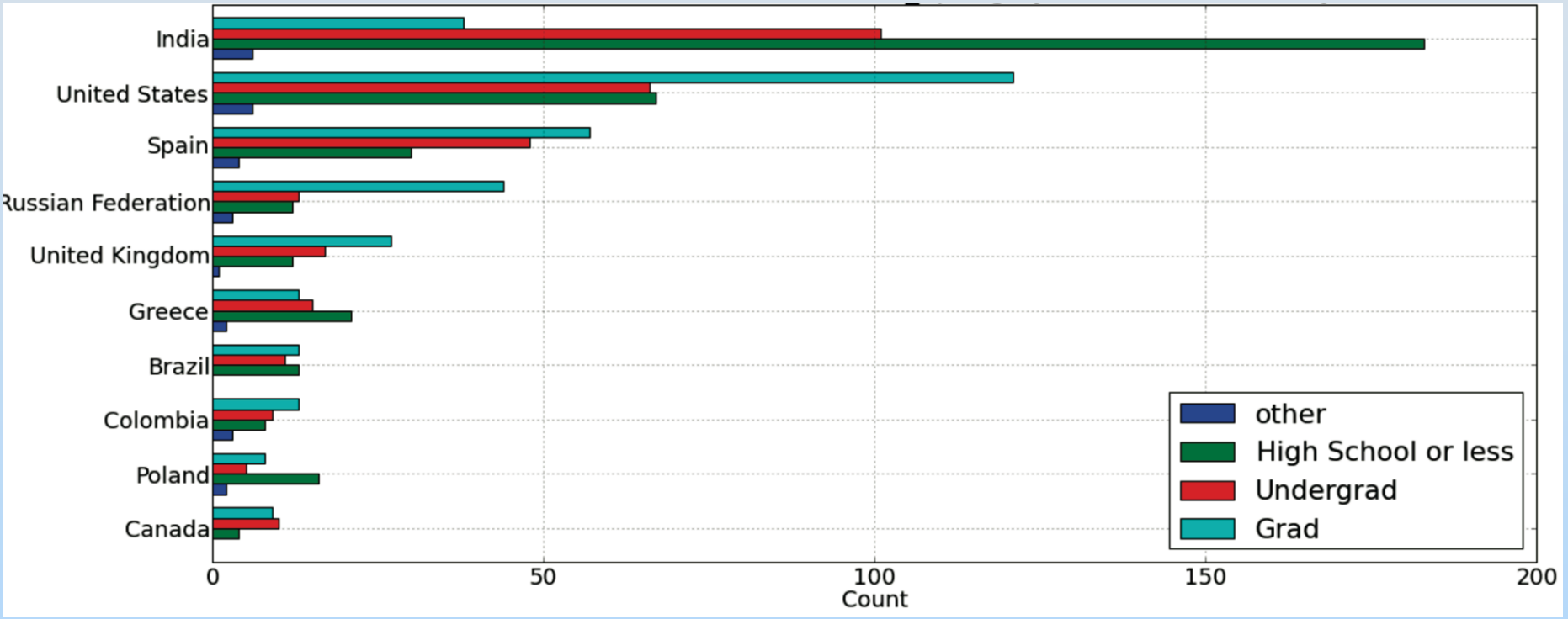
8.02x Geographic Distribiution



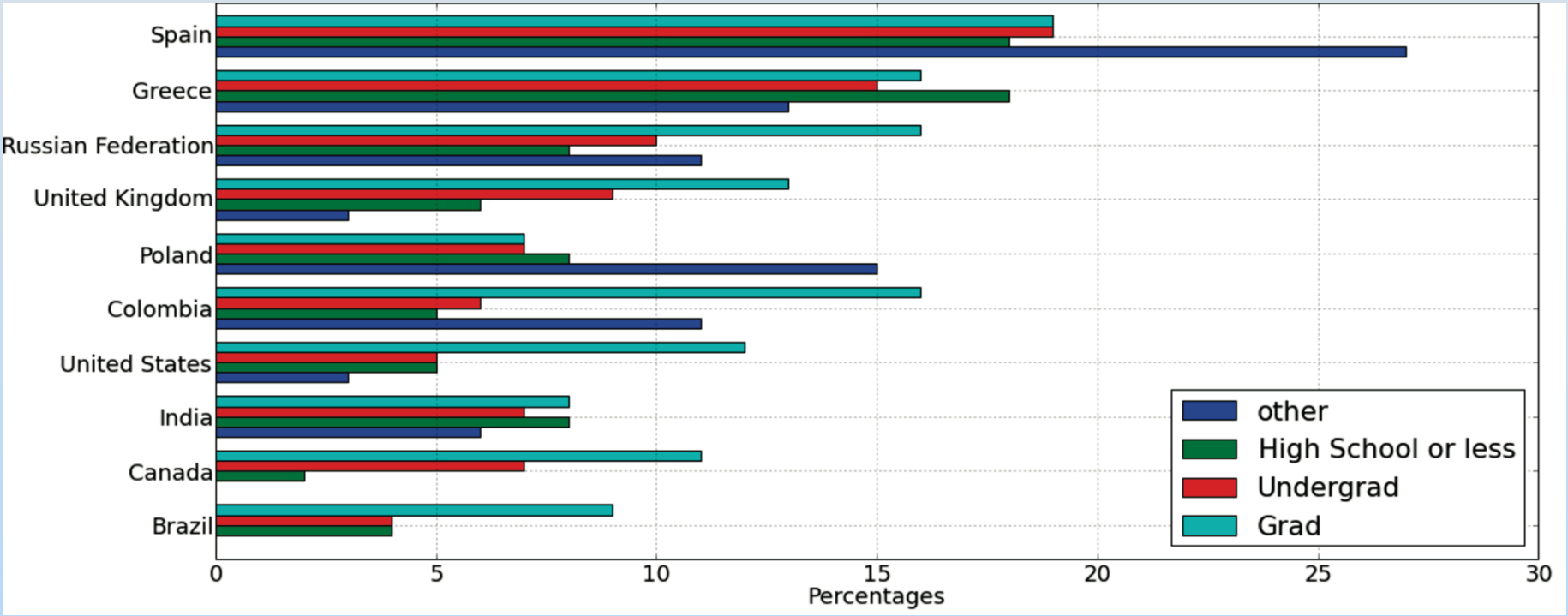
Enrolled Students for MITx/8.02x/ 2013/Spring by ed level and country



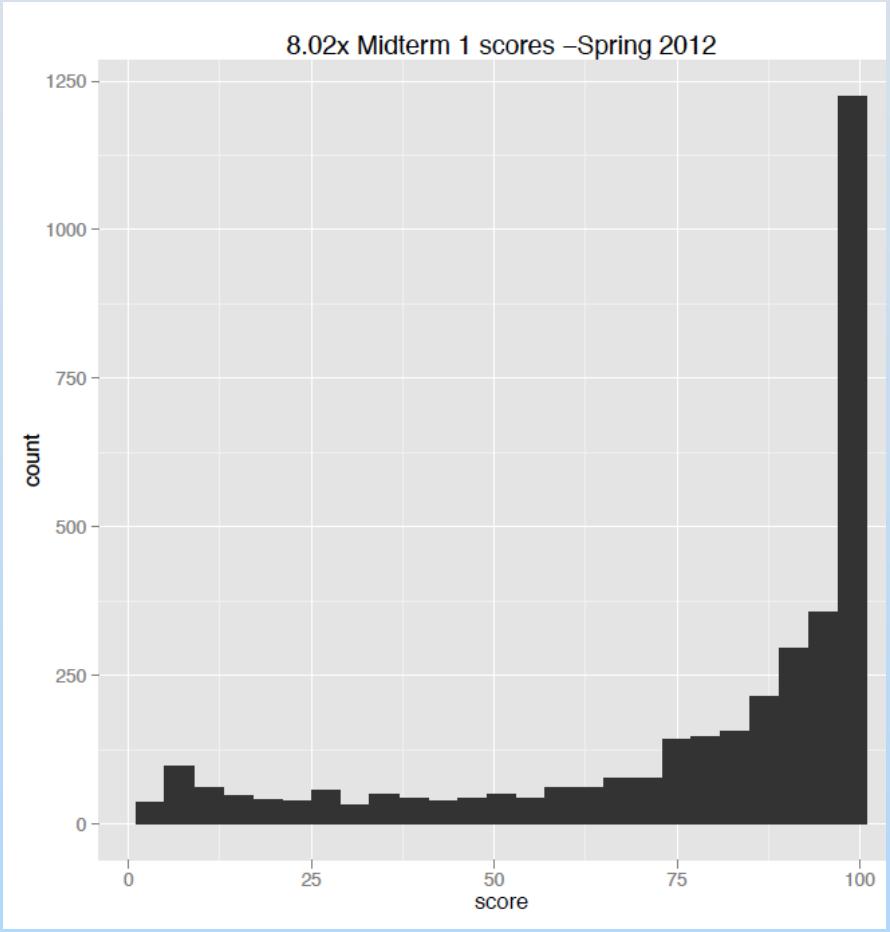
Active Students for MITx/8.02x/2013/ Spring by ed level and country

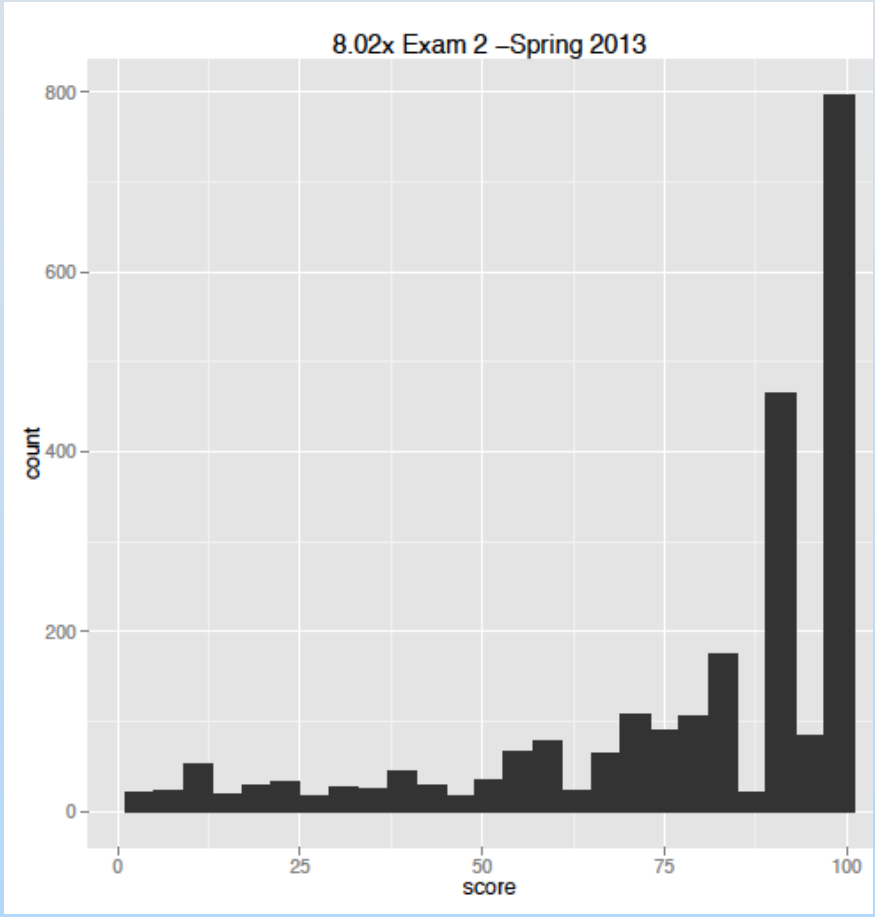


Retention Percentages for MITx/8.02x/ 2013/Spring by ed level and country



MidTerm Exam Scores





Developing MITX Courses

Small Steps

Know your audience

Recycle Content

Build community

Get Help!

Quality Control, Good is not good enough

Have fun!

Implications for Residential Education

Integrate MIT Courses with MITX course

Enhance the interactive experience of residential education

Crucial Issues for Success

- Get students to diagnose their skill set before the class begins
- Develop tutorials for students who are missing certain skills, design for retention, support materials (learning objectives and assets)
- Passive Learning/Video lectures vs. problem solving: how to facilitate this transition from passive to active learning
- Good assignments: need the right level
- Develop community Teaching Assistants
- Develop materials for future years

Crucial Issue for Success:

- Need support staff: detailed work flow, program manager,
- start-up different from steady state
- two teams: content development, platform development
- setting proper expectations
- good communication with students: office hours

Next Steps

Example: Learning Asset Library

Video Lectures

Text

Simulations

Problem Solving Videos

Concept Questions

Problem Library