ONLINE EDUCATION:
A Catalyst for Higher Education Reforms

April 2016

Final Report
MIT ONLINE EDUCATION POLICY INITIATIVE
Acknowledgements

The work program of the Online Education Policy Initiative was supported by a generous grant from the Carnegie Corporation.

The National Science Foundation-sponsored workshop Learning Sciences and Online Learning: Interaction and Influence for Quality Practice and Research (Award Number 1439272) provided critical input to the OEPI.
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Learning is a complex multi-layered process.
Learning is a complex multi-layered process. Impacting and impacted by many different fields.
Outside-in and inside-out research approaches

Outside-in approaches: observe a system from the outside and make inferences about more detailed system functions.
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Inside-out approaches: start with intrinsic explanations and build understanding outward
Outside-in and inside-out research approaches

Outside-in approaches: observe a system from the outside and make inferences about more detailed system functions.

Inside-out approaches: start with intrinsic explanations and build understanding outward.

Convergence of outside-in and inside-out research approaches has revolutionized fields such as biology and mechanics.
Convergence of outside-in and inside-out models has revolutionized fields.

Education is on the brink of a similar revolution.
RECOMMENDATION 1

Increase interdisciplinary collaboration across fields of research in higher education, using an integrated research agenda.

Take advantage of emerging convergence between outside-in and inside-out approaches.
RECOMMENDATION 2

Promote online as an important facilitator in higher education.

Digital technologies can play a significant role as an education enabler by providing a dynamic digital scaffold.
RECOMMENDATION 3

Support the expanding profession of the “Learning Engineer.”

A creative professional who helps build bridges between fields of education and who translates scholarly research findings into effective practice.
RECOMMENDATION 4

Foster institutional and organizational change in higher education to implement these reforms.

Learn from the experiences in other legacy sectors.
We issue these four recommendations as a call to action to stakeholders in higher education.

- Institutional Leaders
- Legislators & Government Officials
- Legacy Education Companies
- Foundations & Associations
- Broad Educational Research Community
RECOMMENDATION 1

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Learning is a complex multi-layered process. Impacting and impacted by many different fields.
Diverse Fields
Theories and Practices

There is a rich history to draw upon, and values that come along with them

- Constructivism
- Active Learning
- Project/Problem Based Learning
- Constructionism
- Flipped Classes
- Student Centered Education
- Social and Contextual Aspects of Learning
- Interdisciplinary Education
- Discipline Based Education Research
- Social Science
- Ed Tech/CSCL
A call to action

• recognize, encourage and reward interdisciplinary collaborations seeking to advance both the science and the practice of learning

• create a welcoming environment for interdisciplinary research and for collaborative efforts to translate research into practice
A call to action

- guide the selection and development of best practices, to help bridge the gap between research and practice
- work together to ensure that scholarly gains are translated into real improvements for students
- move beyond silos to agree on terminology and ontology, map out overlaps and gaps, and recognize areas of discord
RECOMMENDATION 2

Promote online as an important facilitator in higher education.

Digital technologies can play a significant role as an education enabler by providing a dynamic digital scaffold.
Online as an Enabler

Online activities should be diverse and contextual. They should be appropriate for the learner, instructor, and learning goals.

- Design for the unique affordances of online learning
- Utilize the affordances of digital for design based research that allows for iterative improvement and understanding
- Reposition the roles of teachers within the learning context
Online as an Enabler

Online activities should be diverse and contextual. They should be appropriate for the learner, instructor, and learning goals.

- Create opportunities for innovative learning experiences
- Project based learning
- Just in time learning
- Situated learning in the field
- Combine knowledge of learning “optimization” with “deep learning”
A call to action

• contribute experience in areas such as **curricular design** and **delivery at scale**
• accelerate the **adoption** of science-based learning practices
• identify **paths forward** to a more equitable, more available, and more effective system of higher education drawing on best available tools and best available science
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