

Open Education 2.0: Fostering the Collective Advancement of Learning, Teaching, and Assessment

Toru Iiyoshi, Ph.D.

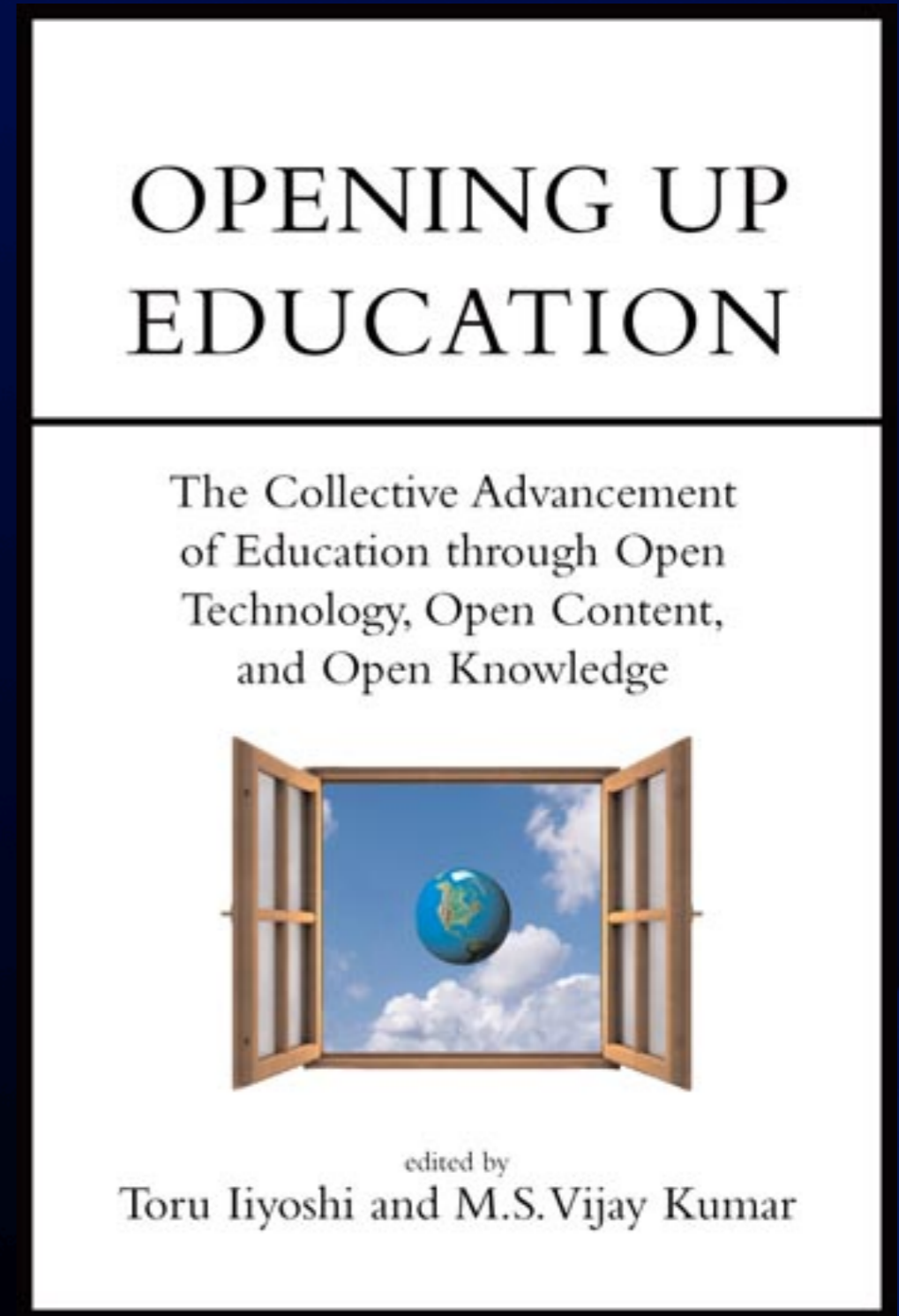
Director & Professor
Center for the Promotion of Excellence in Higher Education
Kyoto University



UNESCO IITE-2014, October 14, 2014, Moscow

A Collaborative Publication Project for Open Education 1.0

- “How can we advance teaching and learning by taking full advantage of open education?”
- A hardcover book + free online distribution with Creative Commons
- 30 chapters by 38 prominent leaders and visionaries (Foreword by John Seely Brown)
- Lessons learned and visions of the future from: OKI, IMS, CNI, Sakai, Moodle, ETUDES, iCampus, VUE, Mellon Foundation, OCW, Connexions, OLI, MERLOT, OpenLearn, SOFIA, Creative Commons, LAMS, Hewlett Foundation, CASTL, VKP, ISSOTL, Open University, Educause, Carnegie Foundation, and more



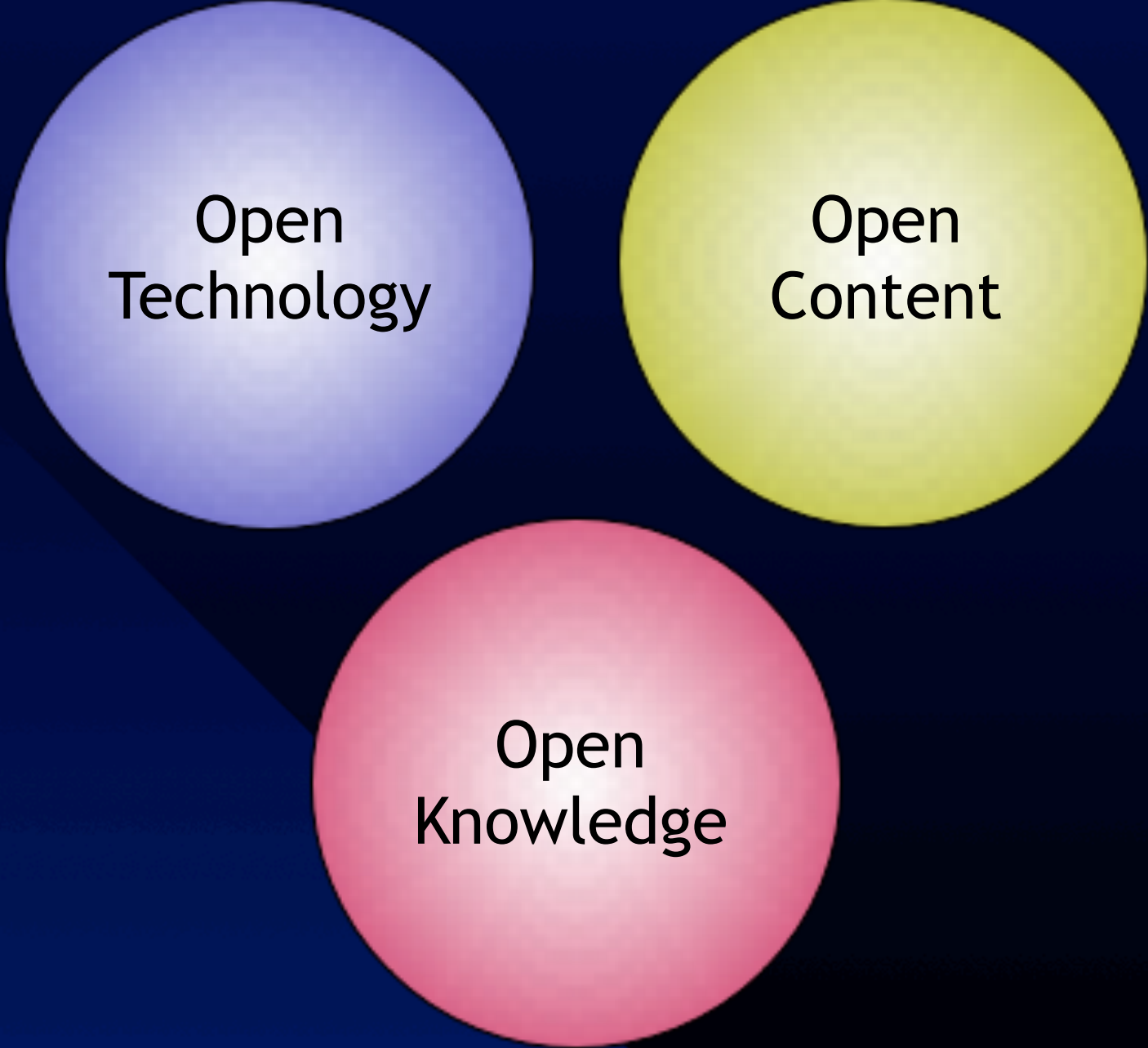
<http://mitpress.mit.edu>
Search: “opening up education”

Carnegie Foundation’s Book on
Open Education (August 2008, MIT Press)

Opening Up Education: A Collaborative Publication Project

- Identify the educational value proposition and implications of open education initiatives
- Help illuminate the micro and macro factors that would move these initiatives from their current stage to their “golden” state
- Explore, as a community of practice and reflection, how we can effectively share educational innovations, pedagogical experience, and knowledge to continuously improve the quality of education

Open Education: Three Components



Open
Technology

Open
Content

Open
Knowledge

Open Content



and more...

E → O → C: Where Are We?

● E-decade: 1990's

- e-Commerce, e-Business, e-Publishing, e-Learning
- Gopher (1991), WWW (1991), Mosaic (1993), XML (1996), WebCT & Blackboard (1997), etc.

● O-decade: 2000's

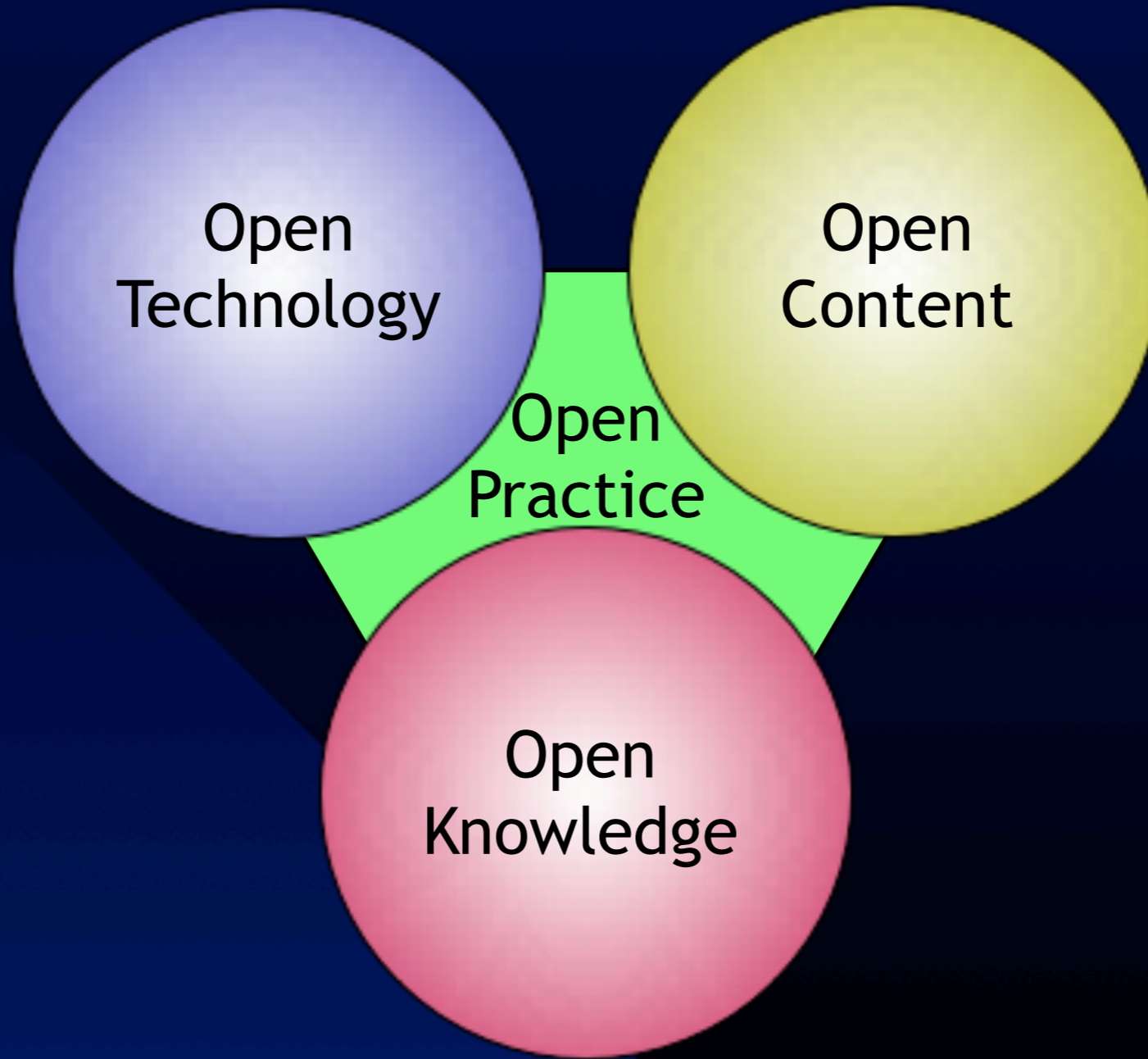
- Opensource, Open System, Open Standards, Open Access, Open Education, Open Research, Open Innovation
- WEB 2.0, Wikipedia, YouTube, Blogs, OpenCourseWare, iTunes U, etc.
- “Liberation Technology” (J. M. Unsworth, 2004)

● C-decade: 2010's

- Collaboration, Collectivity, Communities, Commons, Cloud Computing
- Social Networking Service (SNS), Twitter, Social Learning, Meta University, MOOCs

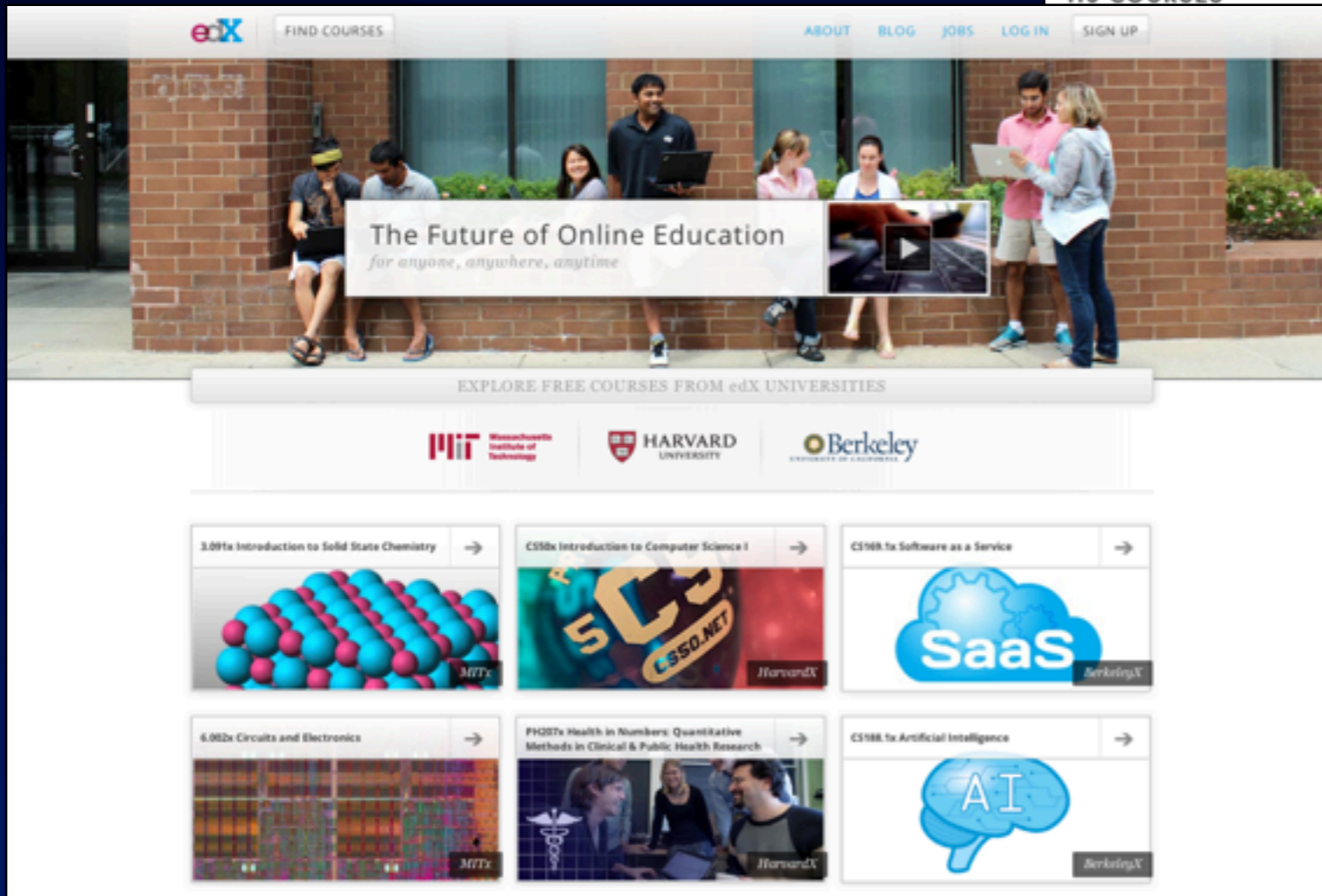
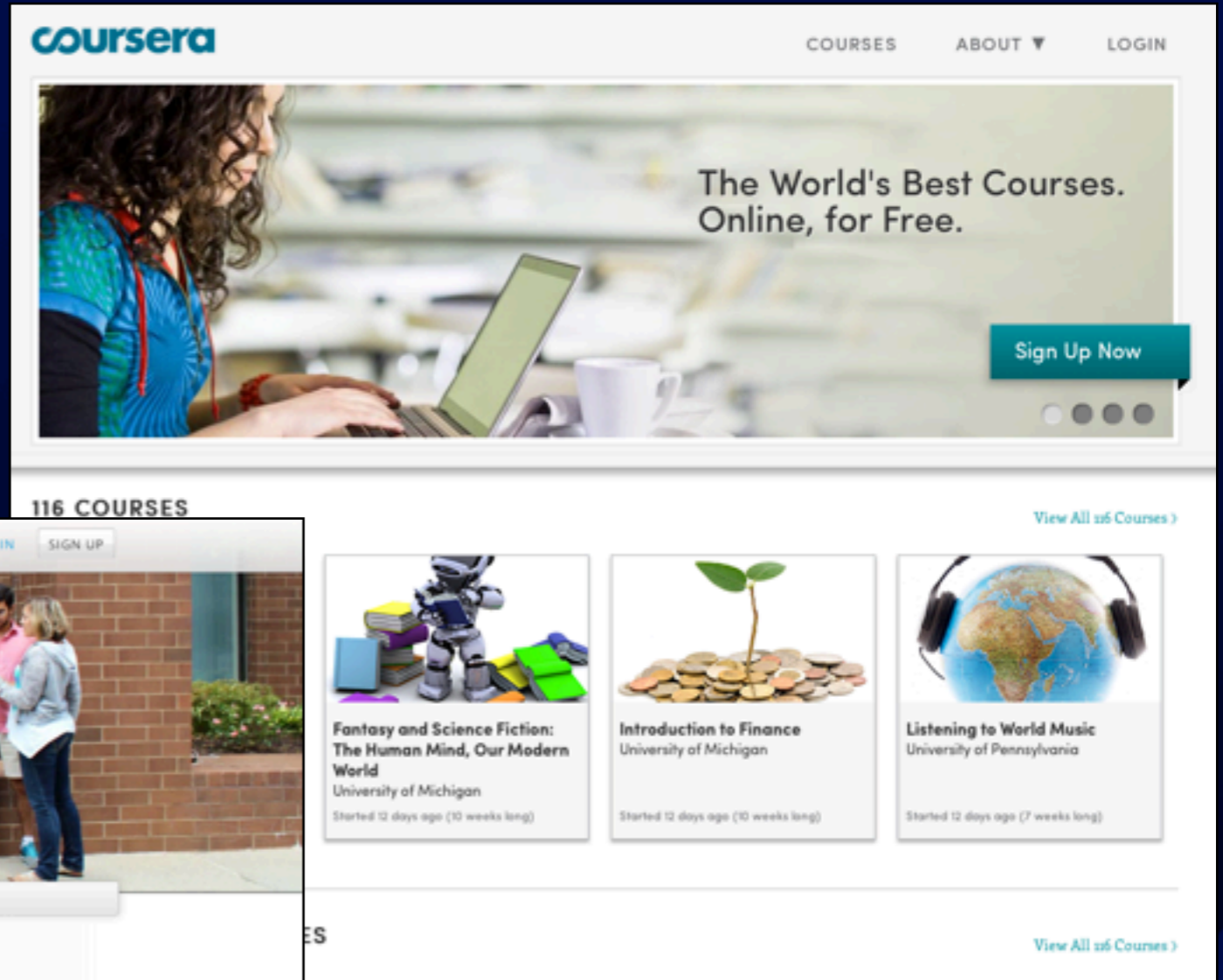


Open Education: Three Components



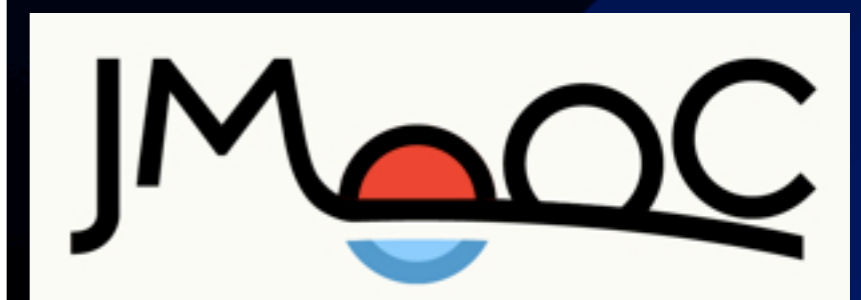
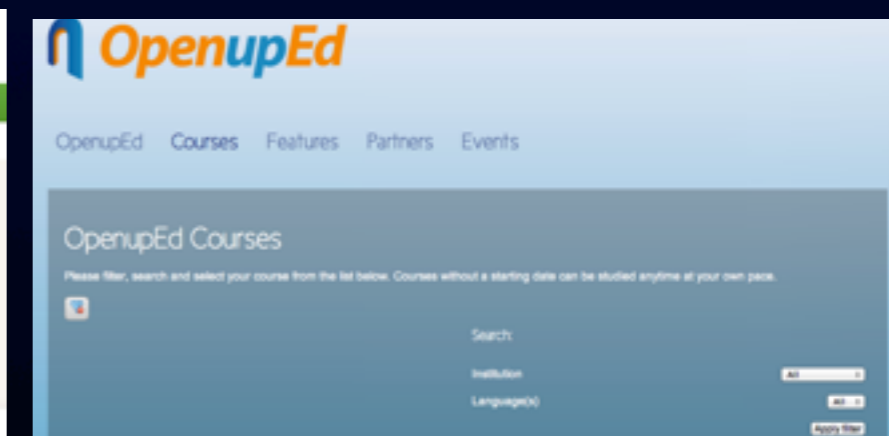
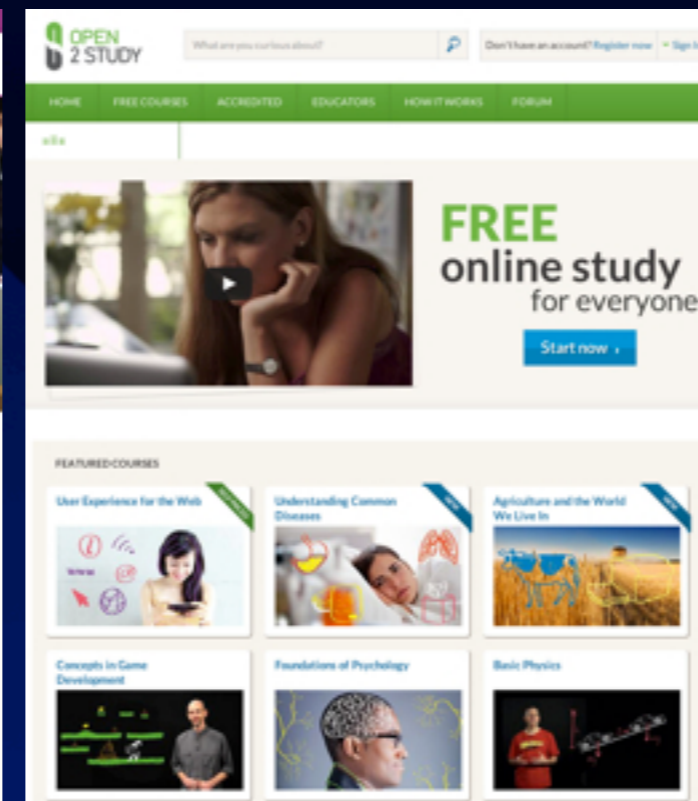
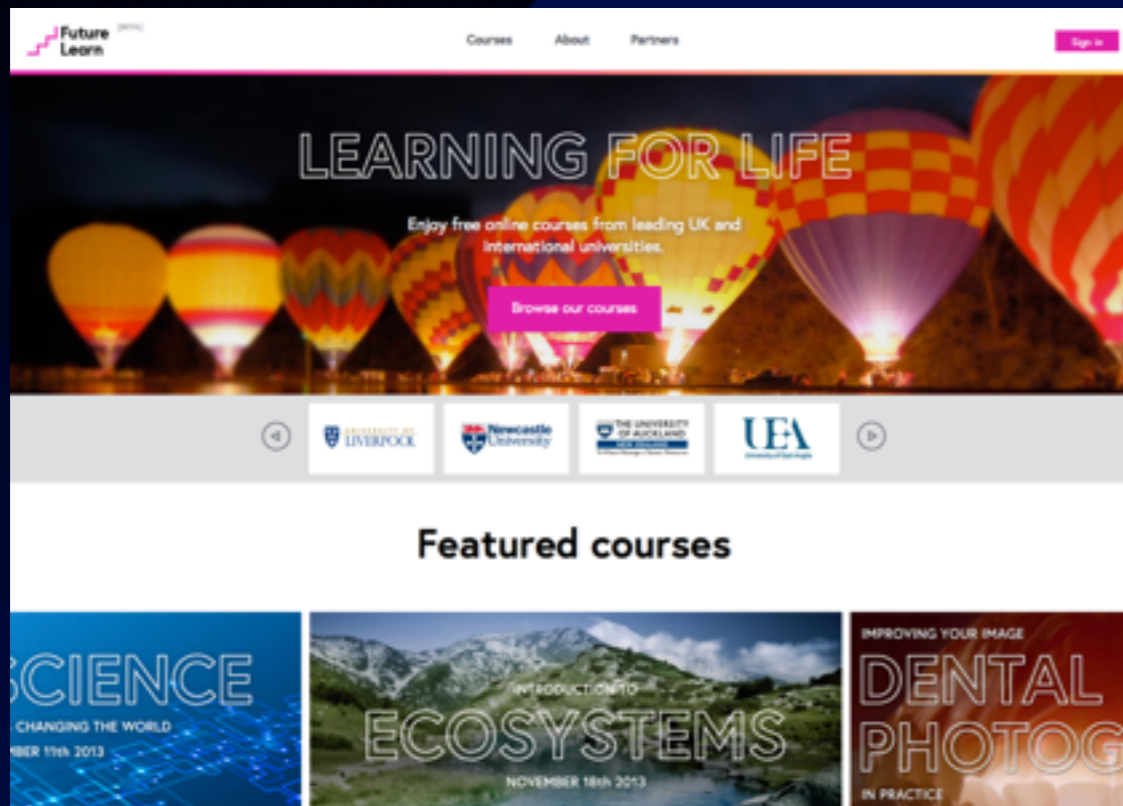
MOOC Wars? Coursera vs. edX

“Battle Royale” by
“Teaching Star” Professors?



A Big Shift Happening?
Organizations (Universities)
↓
Individuals (Professors)

World-Wide Rapid Spread of MOOC (for What?)



Certificates

edX | BerkeleyX

CERTIFICATE
Issued Dec. ??th, 2012

This is to certify that

Ya-Shen Chuang (莊雅善)

successfully completed

CS184.1x: Foundations of Computer Graphics

a course of study offered by **BerkeleyX**, an online learning initiative of **the University of California, Berkeley** through **edX**.

Armando Fox
Armando Fox
Academic Director,
Berkeley Resource Center for Online Education
UC Berkeley

Diana Wu
Diana Wu
Executive Director,
Berkeley Resource Center for Online Education
UC Berkeley

Ravi Ramamoorthi
Ravi Ramamoorthi
Associate Professor
UC Berkeley

HONOR CODE CERTIFICATE
*Authenticity of this certificate can be verified at <https://verify-test.edx.org/cert/15Mfd27785M5d7a3cc4a938ed9366c>

Open Badges

Open Badges
Recognizing learning wherever it happens.

Your Academic Data
Giving learners access to their personal learning profile.

Education Data Standards
A shared vocabulary for education data.

[+ See all education datasets & tools](#)



Learning Registry
Surfacing the best online learning resources for teachers and students.

Higher Education Datasets
Comprehensive data about colleges and technical/vocational schools across the United States.

Evolution or De-evolution of Education?

6-Week MOOC



14-Week MOOC

4-Week MOOC

Or, Campbell's Soup Cans?



(Andy Warhol, 1962)



KyotoUx

Back to schools

Kyoto Imperial University was founded in 1897 and the College of Science and Engineering was established at that time (see the chronological table in the accompanying Facts and Figures booklet). In the following year, the basic organization was completed with the opening of the College of Law, the College of Medicine, the University Hospital, and the University Library. In 1919 "College" was renamed "Faculty," and in 1947 when a new law was passed, Kyoto Imperial University was renamed Kyoto University. From then until today, new faculties, graduate schools, research institutes, research centers, and others have been established one after another. At present, Kyoto University consists of 17 graduate schools, 10 undergraduate faculties, and more than 30 research institutes and centers. In the last few years Kyoto University has placed greater emphasis on graduate level studies and has established new graduate schools to cope with emerging issues which are expected to be critical in this century.

During its long history, Kyoto University has put its energies into developing the humanities, social sciences and natural sciences. Creative research in venture businesses for information technology and electrical engineering has been initiated, and good progress in advanced applied research, such as biotechnology and energy science continues, assuring that our findings contribute to society.

Kyoto University is acknowledged as one of the most accomplished research-oriented universities in Asia. The validity of that reputation is testified by the accolades conferred on our alumni researchers, most notably eight Nobel Prize laureates who undertook vital research during their time at the university. In addition to those awards, several other Kyoto University faculty members have received respected accolades, including two Fields Medalists and one recipient of the Gauss Prize.

COURSES (1) [all](#) | [new](#) | [current](#) | [past](#)

ID:001: Chemistry of Life

Learn how to generate ideas at the interface between chemistry and biology. [MORE](#)

STARTS: April 2014 • INSTRUCTORS: Motonari Uesugi • KyotoUx



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for their campus and the world.



The colleges and universities that comprise the edX consortium are among the best in the world. They are dedicated to quality education both on campus and online. EdX is honored they have chosen to become part of the initiative by opening their virtual doors to the world.





PREVIOUS

← MOOC Professors Claim No Responsibility for How Courses Are Used

NEXT

Harvard Professors Call for Greater Oversight of MOOCs →

MOOC Provider edX More Than Doubles Its University Partners

May 21, 2013, 3:07 pm

By Jeffrey R...

Fifteen mo...
online cou...
founded b...
Harvard U...
12 to 27.

Tuesday's...
anniversa...
and was on...

The new p...
including...
six in Asia,

edX define...
other for-p...
professors...
latest anno...
colleges us...
deliver onl...

At least one new member echoed that sentiment in explaining the decision to sign up. “What we hope to get out of our partnership with edX is actively learning from and building upon each other’s educational innovations,” said Toru Iiyoshi, a professor at the Center for the Promotion of Excellence in Higher Education at Japan’s Kyoto University, in an e-mail interview. “It almost feels like that, by joining edX, we are together creating what Charles Vest once conceived as Meta University,” he added, referring to the former president of MIT.

“It’s not just about MOOCs,” said Anant Agarwal, president of edX.

At least one new member echoed that sentiment in explaining the decision to sign up. “What we hope to get out of our partnership with edX is actively learning from and building upon each other’s educational innovations,” said Toru Iiyoshi, a professor at the Center for the Promotion of Excellence in Higher Education at Japan’s Kyoto University, in an e-mail interview. “It almost feels like that, by joining edX, we are together creating what Charles Vest once conceived as Meta University,” he added, referring to the former president of MIT.

Follow Jeff on Twitter (@jryoung)



Jennifer Howard
is a senior reporter who covers publishing and the humanities and writes Hot Type.

Read Jennifer's posts

Follow Jennifer on Twitter (@jenhoward)



Marc Parry
is a staff reporter who splits his time between covering technology and writing about research in the humanities and social sciences.

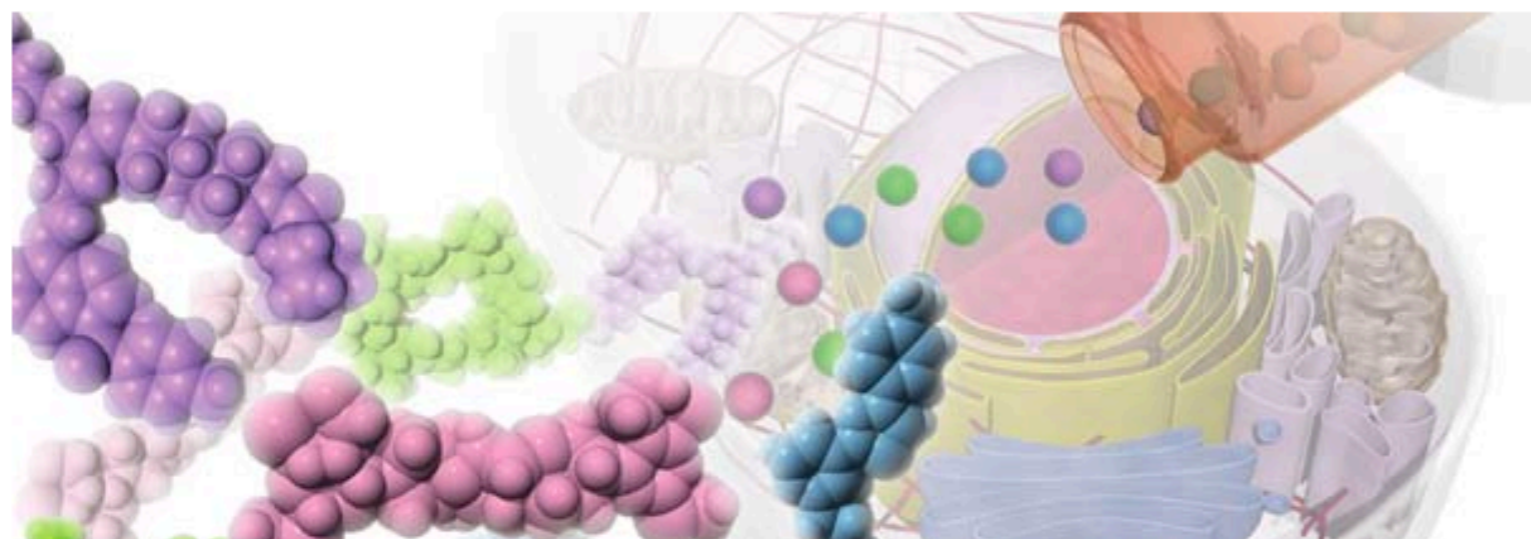
Read Marc's posts

Follow Marc on Twitter (@marcparry)



Steve Kolowich
is a staff reporter covering technology.

Read Steve's posts



The Chemistry of Life

Learn how to generate ideas at the interface between chemistry and biology.

About this Course

Chemistry and biology are traditionally taught as separate subjects at the high school level, where students memorize fundamental scientific principles that are universally accepted. However, at the university level and in industry, we learn that science is not as simple as we once thought. We are constantly confronted by questions about the unknown and required to use creative, integrated approaches to solve these problems. By bringing together knowledge from multidisciplinary fields, we are empowered with the ability to generate new ideas. The goal of this course is to develop skills for generating new ideas at the interface between chemistry and biology by analyzing pioneering studies.



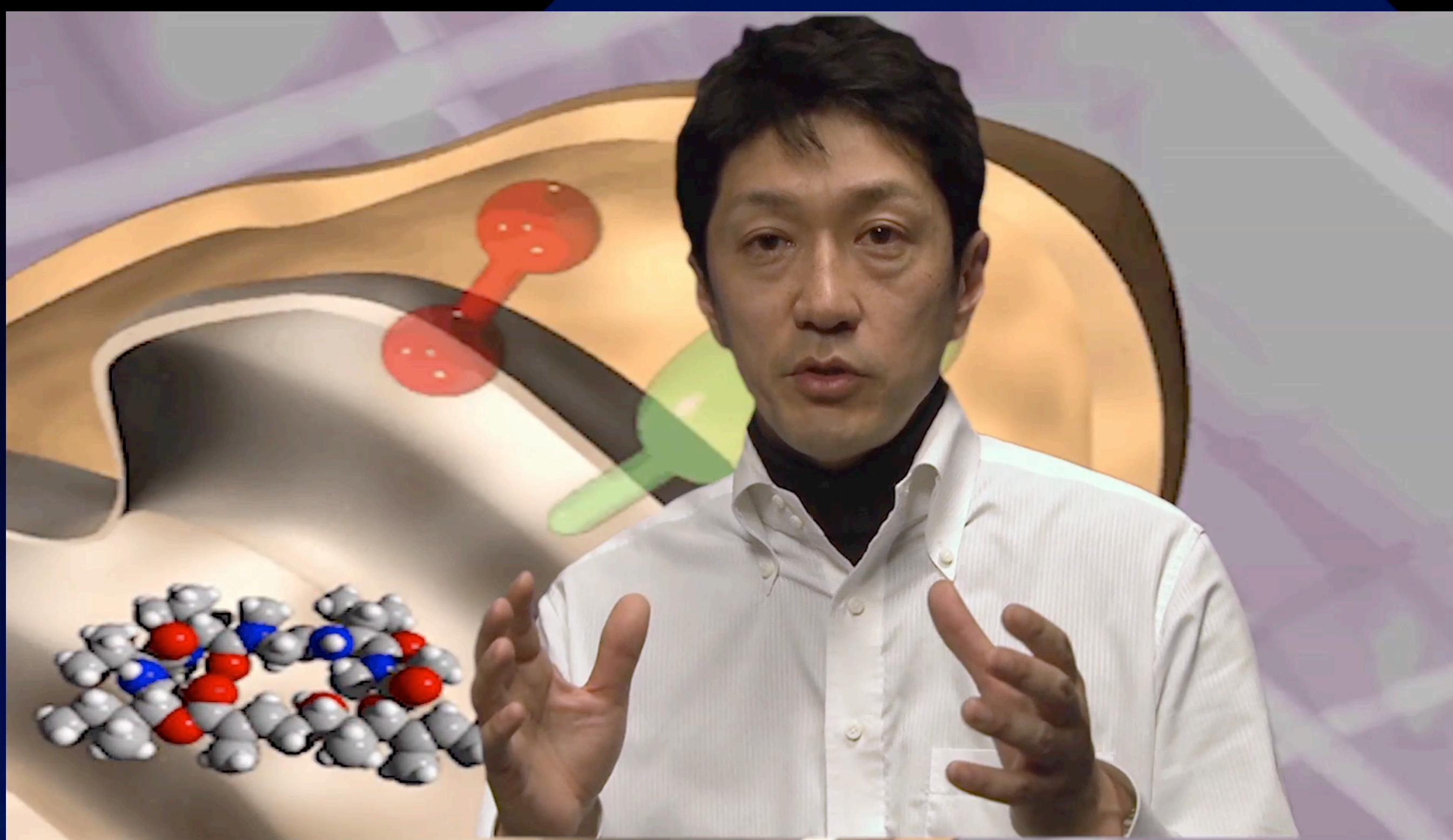
School:	KyotoUx
Course Code:	001x
Classes Start:	10 Apr 2014
Course Length:	15 weeks
Estimated effort:	3 hours/week

Prerequisites:

None. Knowledge of basic junior high school science is recommended.

Register for 001x





KyotoUx001
Chemistry of Life
by Prof. Motonari Uesugi

[Entrance Survey](#)[Meet KyotoUx Staff](#)

Week 1

Lecture 1: Introduction - 27 minutes**Problem 1 - Chemical Bonds**

Week1 Problem1 due Apr 17, 2014 at 00:00 UTC

**Homework 1 - Making of a Drug Constellation**

Homework1 due Apr 17, 2014 at 00:00 UTC



References

[About "iCeMS"](#)[About "ICR"](#)

GUIDELINES FOR HOMEWORK 1

[Download video](#)

Let me show you an example.

If your birthday is in November, you can pick #59,

which is Evista, a selective estrogen receptor modulator that is used in the prevention and treatment of osteoporosis.

You can submit your homework like this.

Do you like this?

Lots of students take this course.

We should be able to complete the list of constellation for the 100 best selling drugs.

Once completed, I will talk to the drug companies that sell those drugs to see if they are interested in using your artwork and donating funds.

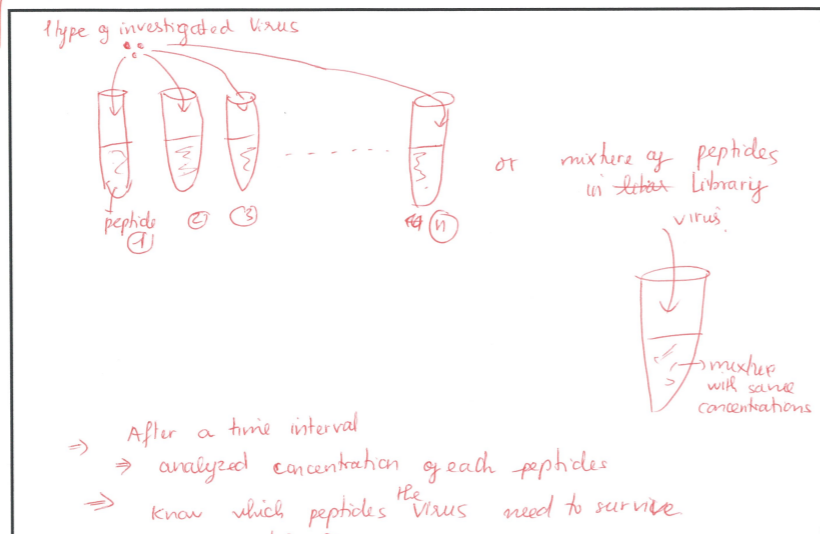
I promise I will give you 50% of the

**Prof. Uesugi DOES NOT like
multiple choice questions!**

What assessment and evaluation methods need to be developed and employed to measure various aspects of creativity meaningfully?

Chemical Biology & Idea Creation

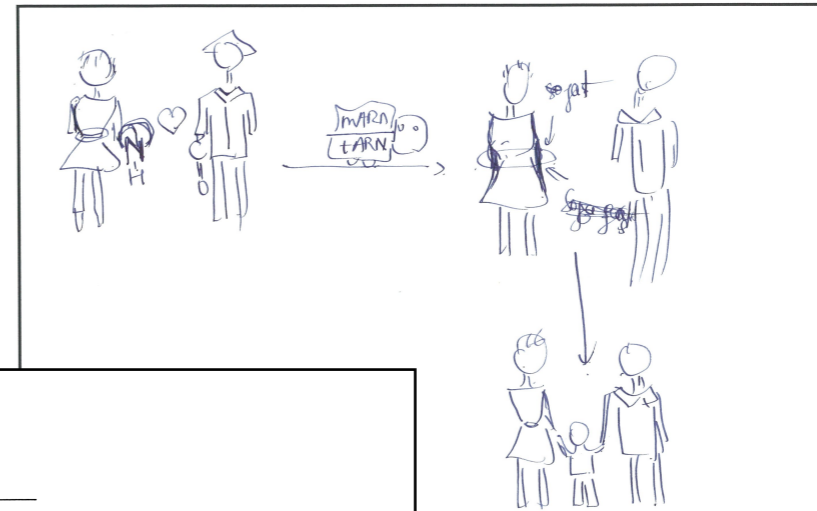
Date: 8/1/2013
 Name: Yo The Star
 Grade: B1 / B2 / B3 / B4 / M1 / M2 / Other ()



→ After a time interval
 → analyzed concentration of each peptides
 → know which peptides the virus need to survive
 ex. peptide 1

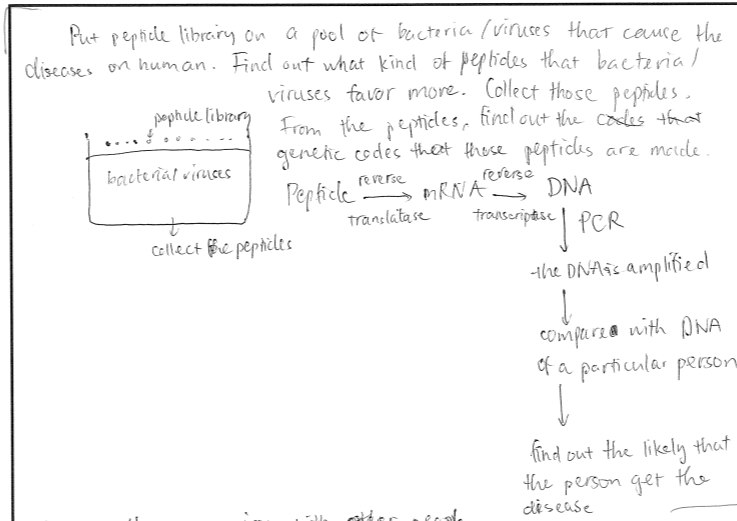
Chemical Biology & Idea Creation

Date: 8/1/2013
 Name: Phuong Thi Thuy Phuong
 Grade: B1 / B2 / B3 / B4 / M1 / M2 / Other ()

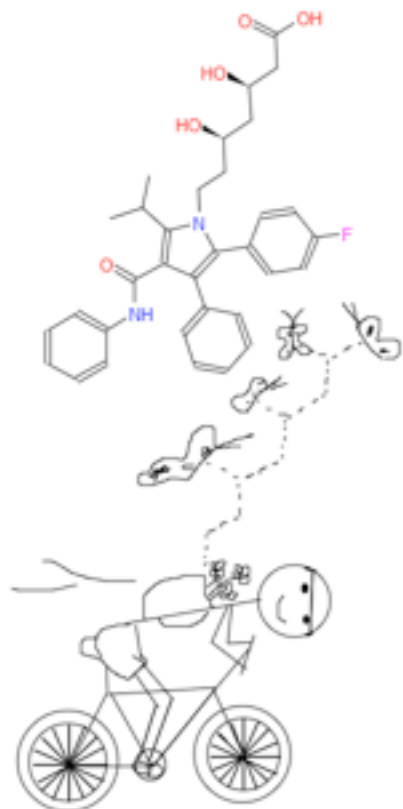


Chemical Biology & Idea Creation

Date: Jan 8th, 2013
 Name: Phuong Thi Thuy Phuong
 Grade: B1 / B2 / B3 / B4 / M1 / M2 / Other ()

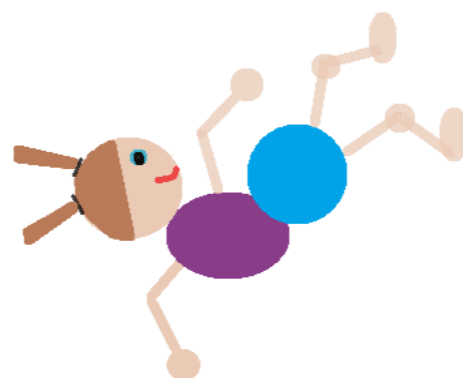
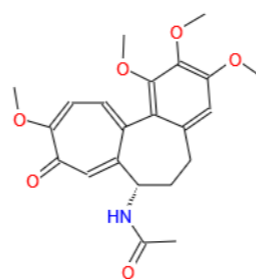


Repeat the comparison with other people.
 Inject vaccine for those who are likely to suffer from the disease, thus preventing them from the disease.



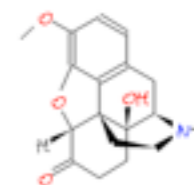
Public Username: Charmine
Chemical formula Number: 62
Title: Biking With Butterflies

Summary: Atorvastatin regulates cholesterol and triglyceride levels. While there are genetic disorders that can increase levels of cholesterol and triglyceride, poor lifestyle is the main culprit. Eating heart-healthy diet, avoiding cigarette smoke, minimizing alcohol consumption, and having a regular exercise can help increase good cholesterol, and decrease bad cholesterol and triglyceride levels in the body. Exercise can be as simple as brisk walking, jogging, and physically active hobbies like biking, swimming, and dancing. Let's live a healthy lifestyle and have life in its fullest measure!



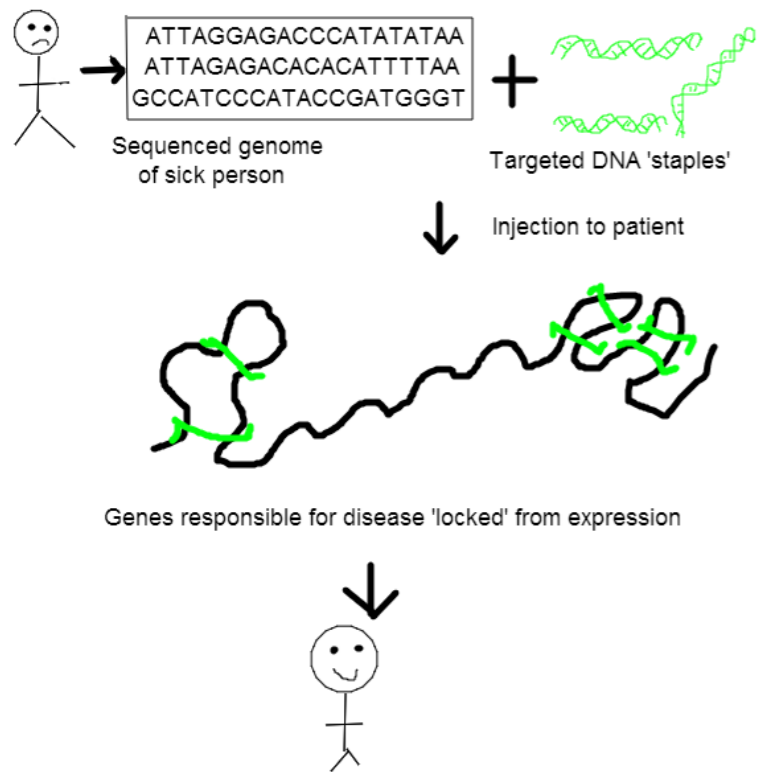
Public Username: HGD
Chemical formula Number: 77
Title: Breakdance

Summary: This drug is used to treat symptoms of arthritis and gout. Using this drug will have you dancing again in no time!



Public Username: Pra7na
Chemical formula Number: 10
Title: Bee Happy

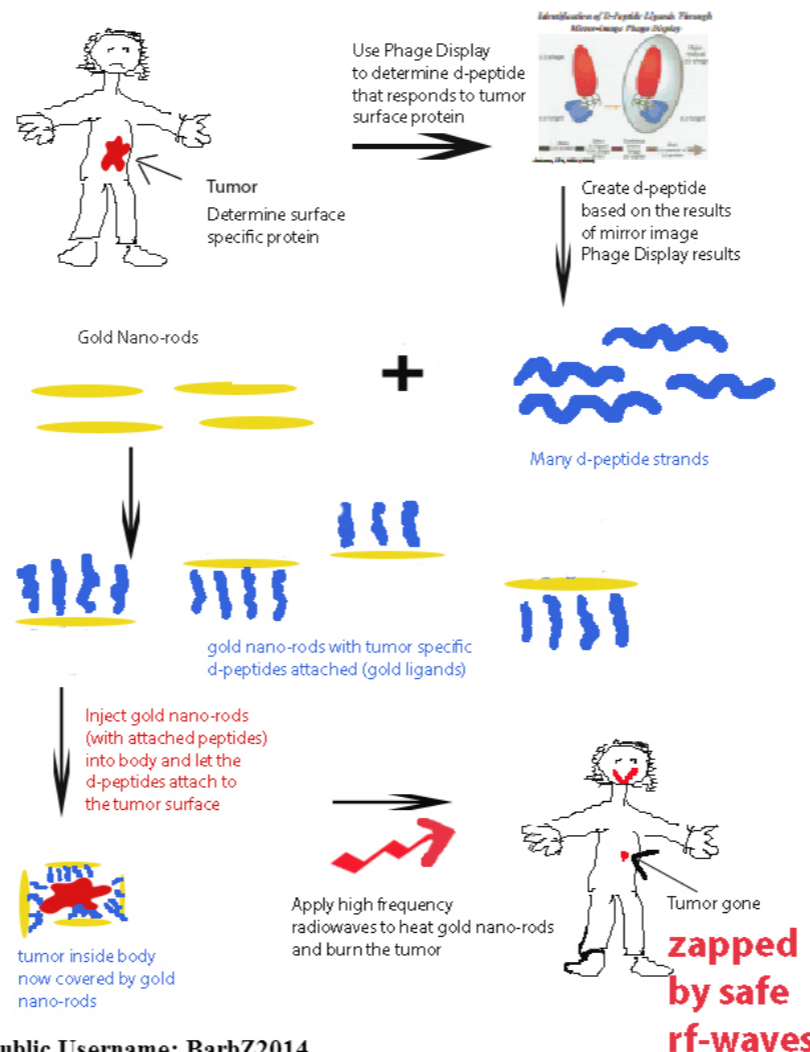
Summary: Oxycodone is used for the relief of moderate to severe pain. The bee is relieved of pain and is happily carrying away the pollen.



Public Username: Valjeans

Title: Locking gene expression with DNA staples

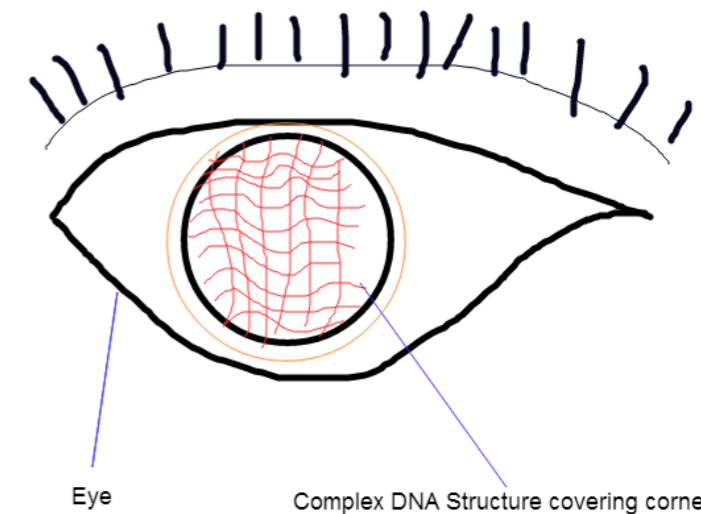
Summary: By analysis of the genome of a person suffering from genetic illness. We can use the technique from 'DNA Origami' to synthesize 'staples' to tie up genes in the patient's DNA responsible for the disease. By altering the three-dimensional structure of the DNA, this will inhibit expression of the gene into RNA and therefore inhibit the related disease.



Public Username: BarbZ2014

Title: Thermal tumor zapper using gold ligand D-peptide

Summary: Use mirror image phage display to identify tumor specific D-peptide. Create gold ligands (on gold nanorods) of the tumor specific D-peptide to deliver and attach gold to the tumor site. The gold nanorods at the tumor site can then be excited/heated with harmless high frequency radio waves to zap/burn the tumor in vitro without hurting any other/non-tumor tissue. This procedure would be an alternative, highly tumor specific non-nuclear type of radiation treatment that would be less harmful than standard, nuclear based radiation treatment for benign and malignant tumors.



Public Username: Orimi

Title: DNA Vision

Summary: Contact Lenses have a lot of problems associated with them. DNA being bio-compatible substance can be used to make biolenses. A complex continuous polymeric structure of DNA can help to make proper transparent biolense. These lenses can prevent problems such as Superficial punctate keratitis (Due to Dry Eyes) and wont create a artificial boundary between eyes and surroundings. If this plan of biolense is successful it can also be surgically implanted in eyes further in future.

neelbhalla

about 5 hours ago



I am getting 0's in peer assessment. How is that even possible, I submitted the home work and put in the effort to do it. If I hadn't submitted the homework, I would still get 0, where is the fairness in all of this? You be the judge here is my link,

<https://www.flickr.com/photos/123157757@N08/13806371425/>

 Report Misuse

You would have gotten a 6/6 from me. Looks like exactly what the assignment called for. Well done.

-posted about 4 hours ago by [soldire](#)



I strongly agree. I far as I can see you have done everything asked for and with a quite clever interpretation of the the molecule's shape. I cannot possibly understand how you have been scored at zero. If I assessed you, you would have got 5 or 6. It seems that peer review system simply does not work.

-posted about 3 hours ago by [Jws009](#)



I really like your homework! I can't understand the zero. :(

-posted about an hour ago by [Jessmpg](#)

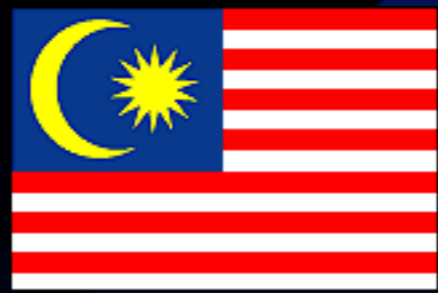


Add a comment...

KyotoUx 001: Three Special Rewards for Learners

- The best student will be considered as a strong candidate for the MEXT (Ministry of Education) fellowship.
- Top five students will be invited to the Kyoto University's campus to experience the campus life (including participating in Prof. Uesugi's and other classes).
- Best TA Award will be granted to some select students who have helped other students voluntarily.

(Announced at the press conference on Nov. 1, 2013)



Malaysia



Pakistan



Yaemen



Nigeria



England



Vietnam



Peru



Canada



Phillipine



U.S.A.



Serbia



Latvia





July 7, 2014 @ Kyoto University

ライフ

ツイート 17

Recommend 2



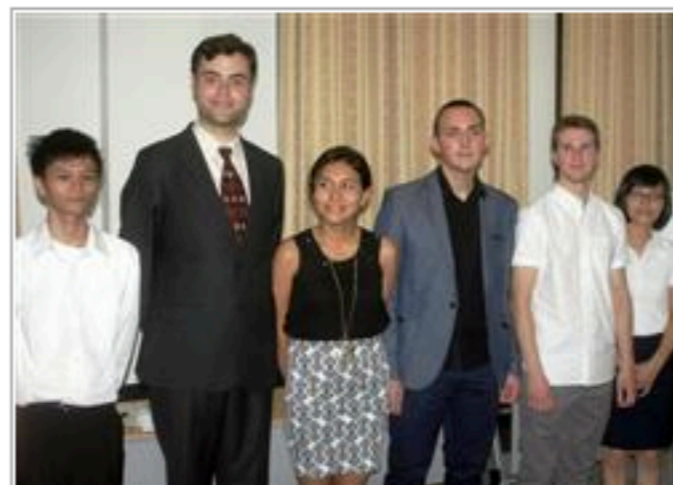
京都大のネット無料配信授業 1万9千人のうち上位6人招待

2014.7.8 12:35

京都大は8日、世界トップレベルの大学がインターネットで講義を無料配信するオンライン教育機関「edX（エデックス）」を通じて4月から配信していた授業で、成績が上位だった国外の6人が来日したと発表した。京大が招待していた。

6人はベトナム、ラトビア、セルビア、ペルー、米国、フィリピン出身の10～20代の大学生や社会人で、エデックスで上杉志成教授の授業「生命の化学」を英語で受講。ミニテストや宿題の評価が、世界中の受講者約1万9千人の中でトップクラスだった。

6人は京都に1週間ほど滞在する。経済的な理由で大学を途中でやめたというフィリピンのエース・スペンサー・アポロニオさん（17）は記者会見で「もともと化学が好きではなかったけど、この授業のおかげで興味が湧いた」と話した。



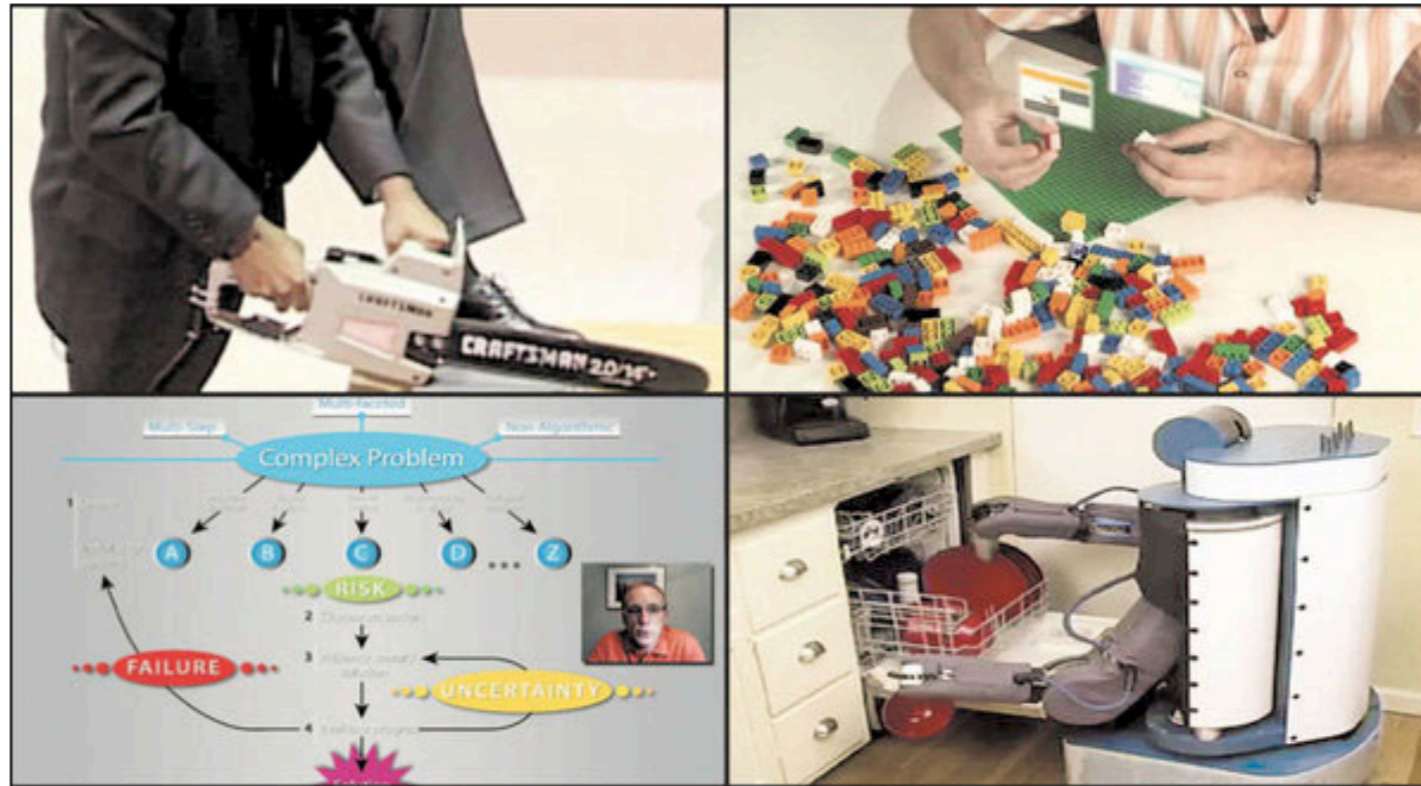
京都大が招待したオンライン教育機関「edX（エデックス）」の優秀者



Flipped or ^{Text} Blended?



The Year of the MOOC



Clockwise, from top left: an online course in circuits and electronics with an M.I.T. professor (edX); statistics, Stanford (Udacity); machine learning, Stanford (Coursera); organic chemistry, University of Illinois, Urbana (Coursera).

By LAURA PAPPANO
 Published: November 2, 2012

IN late September, as workers applied joint compound to new office walls, hoodie-clad colleagues who had just met were working together on deadline. Film editors, code-writing interns and “edX fellows” — grad students and postdocs versed in online education — were translating videotaped lectures into MOOCs, or massive open online courses. As if anyone needed reminding, a row of aqua Post-its gave the dates the courses would “go live.”

[Go to Education Life »](#)

Related

[The Big Three, at a Glance](#)
 (November 4, 2012)

The paint is barely dry, yet [edX](#), the nonprofit start-up from Harvard and the Massachusetts Institute of Technology, has 370,000 students this fall in its first official courses. That’s nothing. [Coursera](#),

- FACEBOOK
- TWITTER
- GOOGLE+
- SAVE
- EMAIL
- SHARE
- PRINT
- SINGLE PAGE
- REPRINTS

8 Things You Should Know About MOOCs

1. The overwhelming majority of MOOC students are male
2. MOOCs attract students who already have college degrees
3. The median age of MOOC participants is 24
4. One-third of MOOC participants are from North America
5. Nearly half of registrants never engage with any of the content
6. European view the most course content
7. Students with a doctorate viewed more course material
8. Serial students are the most engaged

On Chronicle of Higher Education (J. Newman & S. Oh, 2014)



Crafting an Effective Writer: Tools of the Trade

Lawrence (Larry) Barkley, Ted Blake and Lorrie Ross



Sessions:

Add to Watchlist

410 261 2.5k
 Tweet +1 Like

About the Course

Learn to become an effective builder of sentences using the basic tools of grammar, punctuation, and writing. By dedicating yourself to the craft of writing, you will learn to use the eight parts of speech and grammar to develop the four basic sentence types into a well-organized, detailed paragraph. This course is designed for anyone who wants to become a better writer. If you need to write more clearly for work, prepare for a placement test for a college, or improve your skills for current writing projects, this class will definitely be beneficial.

Objectives:

- Students will be able to identify and correct some sentence level grammatical and punctuation errors.
- Students will be able to develop four sentence types: simple, compound, complex and compound-complex.
- Students will be able to recognize and use all four sentence types.
- Students will be able to develop a clear topic sentence.
- Students will be able to write a well-organized, detailed paragraph.

Why would you want to take this course? There is a variety of reasons:

- As a pre-Assessment activity
- As a petition for English placement

About the Instructors



Lawrence (Larry) Barkley
 Mt. San Jacinto College



Ted Blake
 Mt. San Jacinto College



Lorrie Ross
 Mt. San Jacinto College


Course Details

Workload: 4-5 hours/week

Taught In: English

Introductory Algebra Review

Equivalent Fractions

$$\frac{1}{4} = \frac{2}{8}$$


factors of 2:
1, 2

factors of 8:
1, 2, 4, 8

$$\frac{2}{8} = \frac{\cancel{2} \times 1}{\cancel{2} \times 4}$$

$\frac{6}{9}$

What is the greatest common factor that 6 and 9 share?

1

0:29 / 0:43

3D YouTube

Beginner

[View Free Courseware](#)

Class Summary

This course provides a brief review of introductory algebra topics. Topics to be covered include integer operations, order of operations, perimeter and area, fractions and decimals, scientific notation, ratios and rates, conversions, percents, algebraic expressions, linear equations, the Pythagorean theorem, and graphing.

What Should I Know?

This is a review course, it is expected that students will have some previous knowledge of most topics covered in the course.

Made possible through a grant from the Bill and Melinda Gates Foundation.

What Will I Learn?

At the end of this course students will have reviewed the core topics of introductory algebra. Students will be comfortable with the concepts and procedures of introductory algebra, and be able to apply their knowledge to other coursework and real-world problems.

During this course, you will review

Integer operations including addition, subtraction, multiplication, division, and absolute value. Evaluating using order of operations. Associative and Commutative properties. Perimeter and area of rectangles, triangles, squares, and circles.

Course Instructors

Kelly Vetter

Instructor



Teacher-Student Relationship



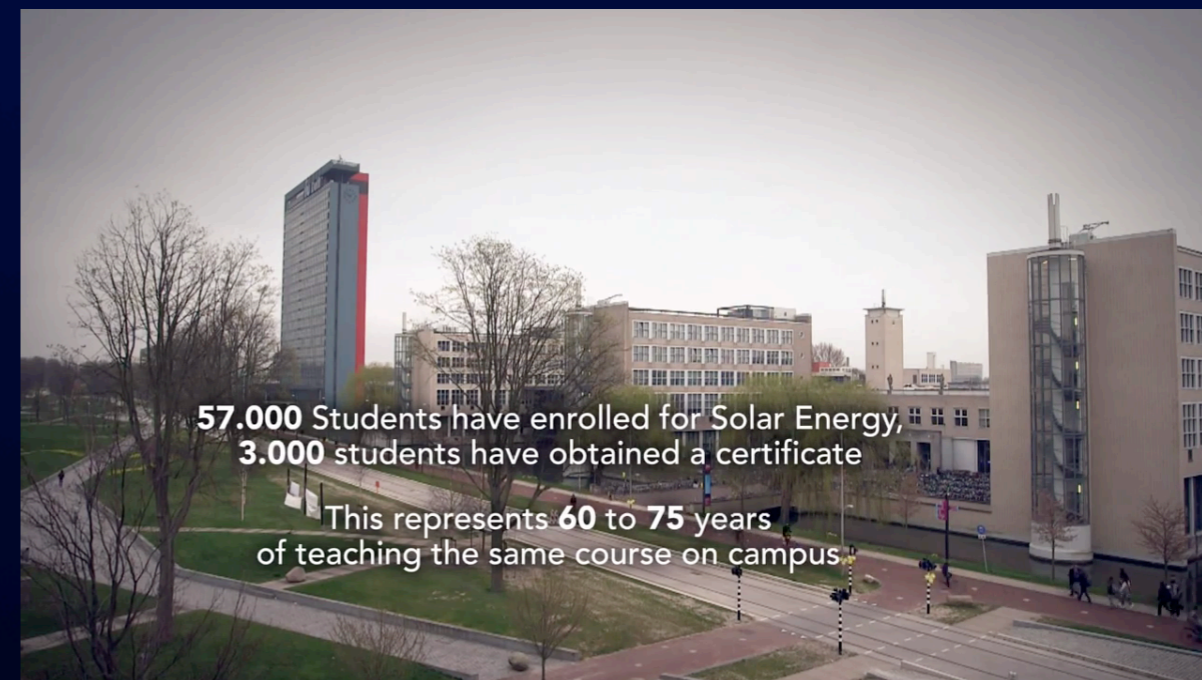
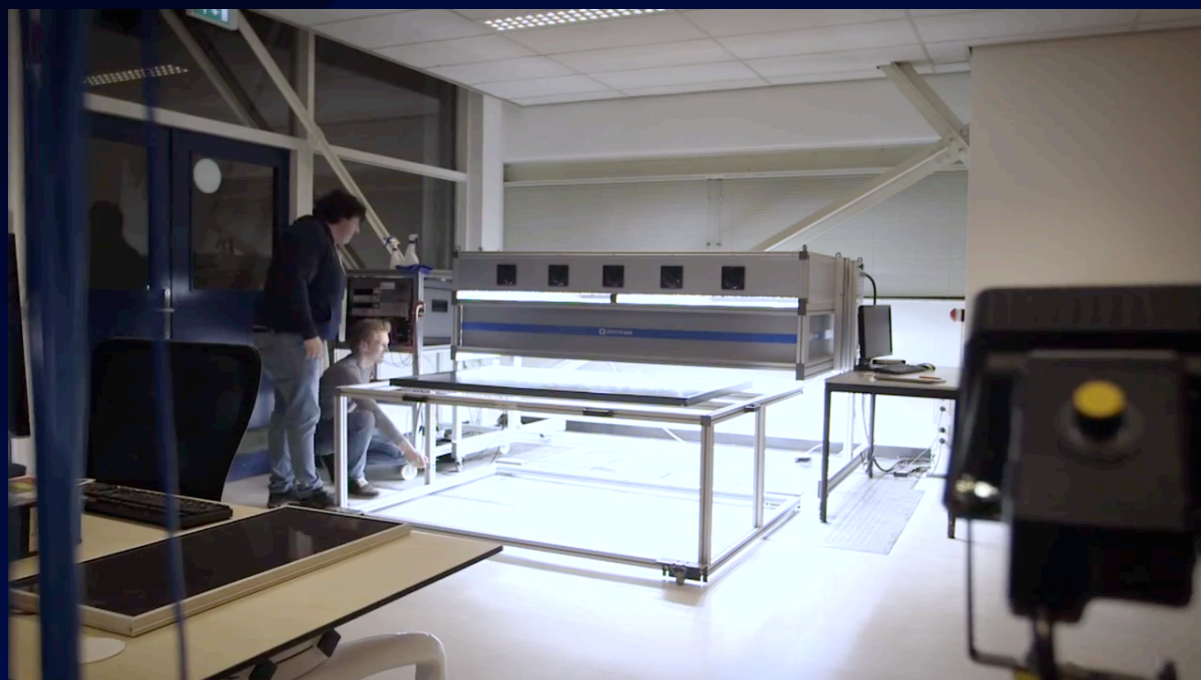
FLATTEN

MOOC @ Delft University of Technology

NEW ET.3034TU: Solar Energy

Discover the power of solar energy and design a complete photovoltaic system.

STARTS: 1 Sep 2014 **INSTRUCTORS:** Arno Smets **DelftX**



Open Your Mind

Research | ICT | Open Education Week

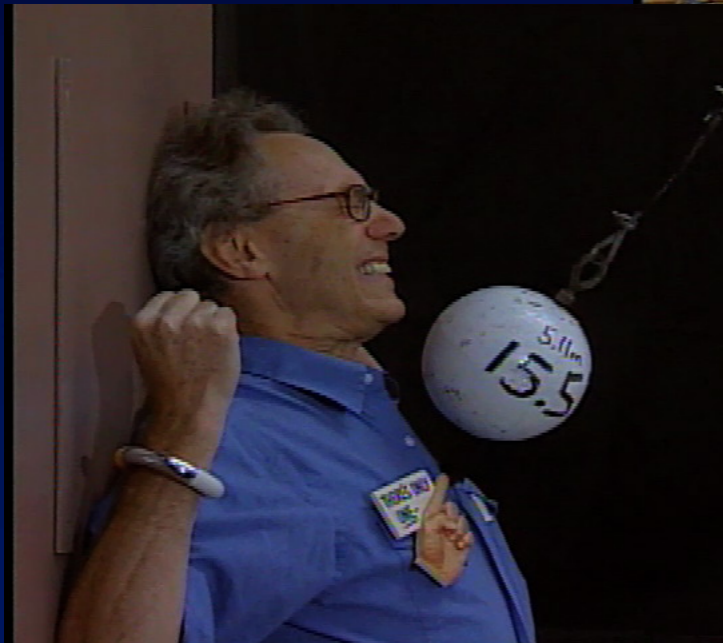
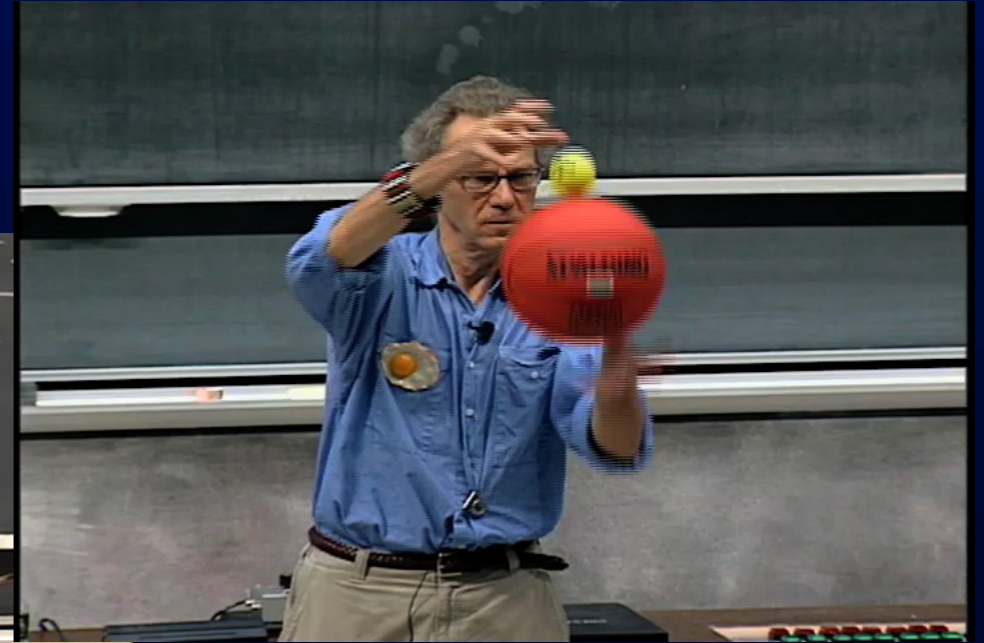
accessible to anyone, anywhere in the world, who has access to internet. TU Delft will be the first edX partner to issue its courses under a creative commons license. The free courses are open to

DelftX

TU Delft offers courses as 'Massive Open Online Courses' (MOOCs) on edX. EdX is a non-profit platform for online education through which MIT, Harvard and others, make a range of courses accessible to anyone, anywhere in the world, who has access to internet. TU Delft will be the first edX partner to issue its courses under a creative commons license. The free courses are open to everyone, without prior education or entry examination. MOOCs will be taught just like courses on the campus: in a fixed period of eight weeks and with opportunities for interaction between fellow participants. The modules come with homework and a certificate of participation may be issued by the DelftX on completion.

Building upon the OER & OpenCourseWare tradition and assets!

Circus Physics at MIT





MIT OPEN COURSEWARE

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Home > Courses > Physics > 8.01 Physics I: Classical Mechanics, Fall 1999

Email this page

8.01 Physics I: Classical Mechanics

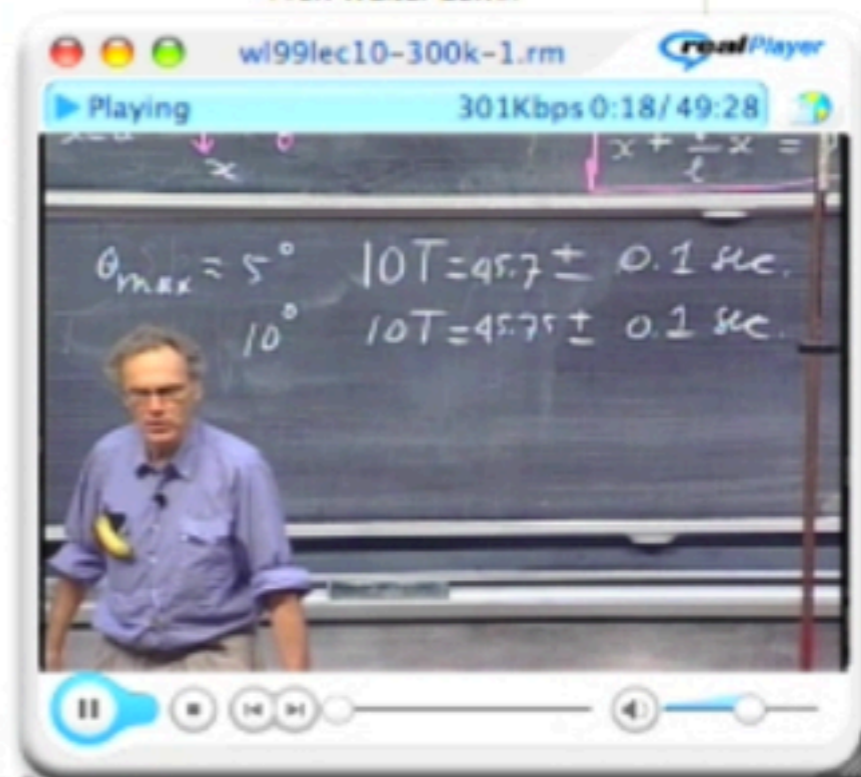
[DONATE NOW](#)

Staff

Instructor:
Prof. Walter Lewin

VIEW ALL COURSES

- Course Home
- Syllabus
- Calendar
- Lecture Notes
- Assignments
- Exams
- Video Lectures
- Discussion Group
- Download this Course



Professor Lewin puts his life on the line in [Lecture 11](#) by demonstrating his faith in the Conservation of Mechanical Energy.

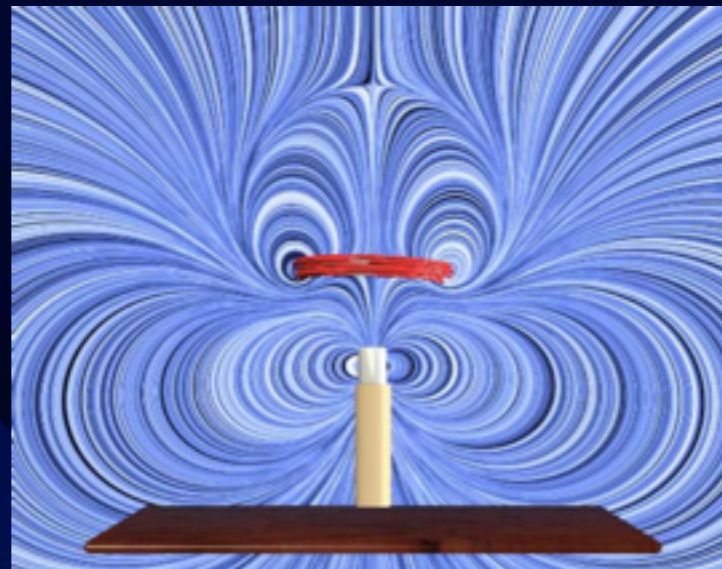
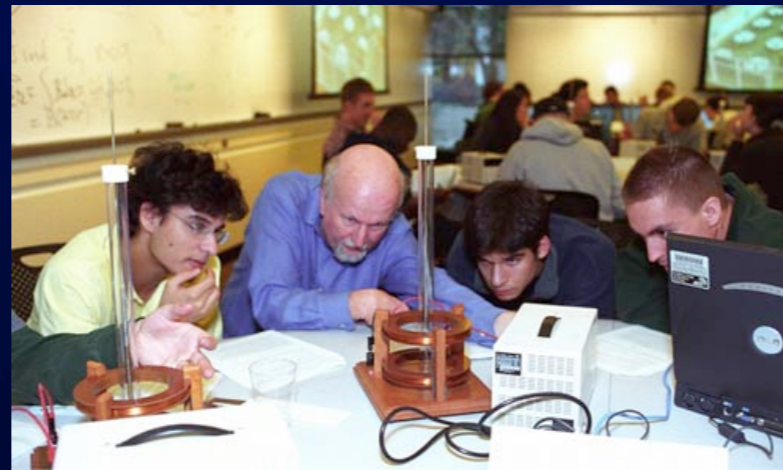
Highlights of this Course

This course features [lecture notes](#), problem sets with solutions, [exams](#) with solutions, links to related resources, and a complete set of [videotaped lectures](#). The 35 video lectures by Professor Lewin, were recorded on the MIT campus during the Fall of 1999. Prof. Lewin is well-known at MIT and beyond for his dynamic and engaging lecture style.

> [Download](#) the complete contents of this course.

Course Description


TEAL (Technology Enable Active Learning)





The Gallery of Teaching and Learning - KEEP Case Studies: Transferring Knowledge and Experience

From a traditional lecture course to student-centered collaborative learning

8.01x = The Best Remix of 8.01 + 8.01T

HOW IT WORKS COURSES SCHOOLS REGISTER NOW Login

COURSE DETAIL



Classical Mechanics

Covers the basics of Newtonian mechanics, fluid mechanics, kinetic gas theory and thermodynamics in addition to exploring other real-world phenomena.

ABOUT THIS COURSE





8.01x is an online version of Classical Mechanics, which is the first of MIT's introductory physics courses. The course covers the basic concepts of Newtonian mechanics, fluid mechanics and kinetic gas theory. A variety of other interesting topics are covered, such as resonance phenomena, musical instruments and astronomical phenomena such as binary stars, neutron stars, black holes, stellar collapse, and supernovae. You will also be given a peek into the intriguing world of quantum mechanics.

The course follows the MIT on-campus class as it was given by the renowned Professor Walter Lewin in the fall of 1999. This includes his video lectures, problem solving sessions, and, of course, his famous in-class demonstrations. Professor Lewin, proclaimed "a Web Star" by The New York Times, has supplemented his lectures by including interactive questions to help students check their understanding during the lectures themselves.

School:	MITx
Course code:	8.01x
Classes start:	9 Sept 2013
Estimated effort:	12 hours per week

Prerequisites:
Some mathematical training is needed (High school level Algebra and Trigonometry), and an introduction to Calculus. At MIT, 18.01 Single Variable Calculus is a co-requisite for 8.01 (the two courses can be taken in the same semester). [see more...](#)

[Register for 8.01x](#)

39

The Changing Landscape

of Higher Education

By David J. Staley
and
Dennis A. Trinkle

T

he landscape of higher education—the growing variety of higher education institutions, the cultural environment, the competitive ecosystem—is changing rapidly and disruptively. The higher education landscape is metaphorically crossed with fault lines, those fissures in the landscape creating potential areas of dramatic change, and is as “seismic” as it has been in decades. Below we identify ten such fissures or fault lines in the larger landscape of higher education. Unlike the *Horizon Report*,¹ which looks largely at technology trends, we are looking at a context and environment wider than IT departments. Indeed, most of the fissures noted below are not technological, although they encompass significant technical implications. Those of us in information services and information technology need to be aware of these larger changes and the impact they will have on college and university IT departments and on academic computing. Consider this article advanced warning of potentially tectonic change. >>



Paradigm Shift in Higher Education Towards Open Education 2.0

- Structural change of higher education system:
Pipeline → Network (knowledge & people)

Data & Learning
Analytics

How can Open Education play out
in this rapidly changing HE landscape?

RE-EXAMINING:

- the notion of “university as a physical space”
- the entity of “university as a business organization”
- “university faculty” as a “solid” profession
- the roles of “faculty (as teachers) vs. students (as learners)”
- the traditional view of “learning assessment”
- the traditional view of “higher education = degrees”
- the traditional view of “society vs. higher education”

Michael vs. Michael



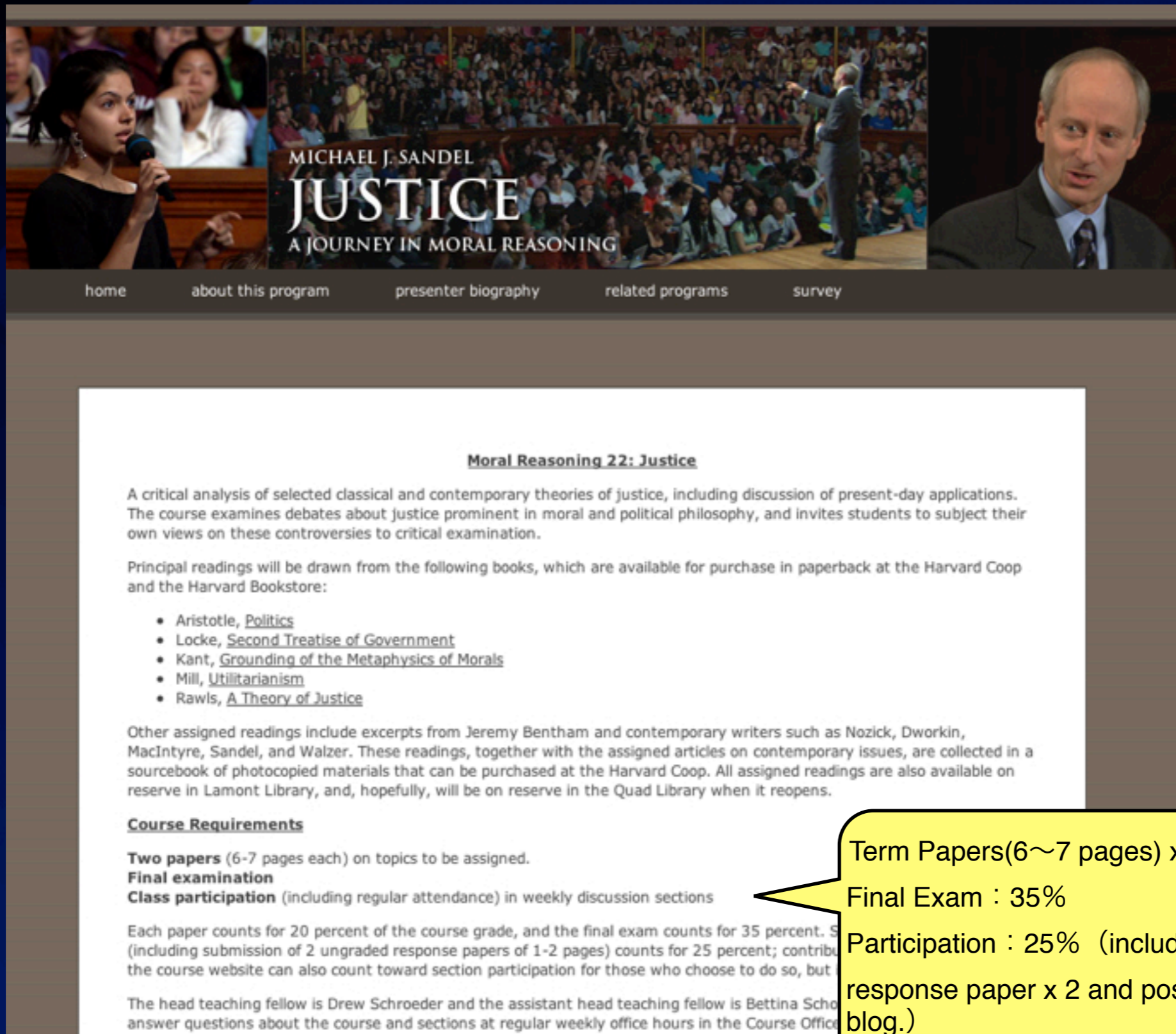


Michael Sandel's Justice @Harvard



Michael Jackson's Slave to the Rhythm (2014)

Justice to Grading Policies!



home about this program presenter biography related programs survey

Moral Reasoning 22: Justice

A critical analysis of selected classical and contemporary theories of justice, including discussion of present-day applications. The course examines debates about justice prominent in moral and political philosophy, and invites students to subject their own views on these controversies to critical examination.

Principal readings will be drawn from the following books, which are available for purchase in paperback at the Harvard Coop and the Harvard Bookstore:

- Aristotle, [Politics](#)
- Locke, [Second Treatise of Government](#)
- Kant, [Grounding of the Metaphysics of Morals](#)
- Mill, [Utilitarianism](#)
- Rawls, [A Theory of Justice](#)

Other assigned readings include excerpts from Jeremy Bentham and contemporary writers such as Nozick, Dworkin, MacIntyre, Sandel, and Walzer. These readings, together with the assigned articles on contemporary issues, are collected in a sourcebook of photocopied materials that can be purchased at the Harvard Coop. All assigned readings are also available on reserve in Lamont Library, and, hopefully, will be on reserve in the Quad Library when it reopens.

Course Requirements

Two papers (6-7 pages each) on topics to be assigned.
Final examination
Class participation (including regular attendance) in weekly discussion sections

Each paper counts for 20 percent of the course grade, and the final exam counts for 35 percent. S (including submission of 2 ungraded response papers of 1-2 pages) counts for 25 percent; contribution to the course website can also count toward section participation for those who choose to do so, but

The head teaching fellow is Drew Schroeder and the assistant head teaching fellow is Bettina Sch... answer questions about the course and sections at regular weekly office hours in the Course Office

Term Papers(6~7 pages) x 2 : 20% each
Final Exam : 35%
Participation : 25% (including no-grading response paper x 2 and posting on the course blog.)

Miku Hatsune + Multiple Choice Questions?



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TABLE 1: LEARNING AND ACADEMIC ANALYTICS

TYPE OF ANALYTICS	LEVEL OR OBJECT OF ANALYSIS	WHO BENEFITS?
Learning Analytics	Course-level: social networks, conceptual development, discourse analysis, “intelligent curriculum”	Learners, faculty
	Departmental: predictive modeling, patterns of success/failure	Learners, faculty
Academic Analytics	Institutional: learner profiles, performance of academics, knowledge flow	Administrators, funders, marketing
	Regional (state/provincial): comparisons between systems	Funders, administrators
	National and International	National governments, education authorities

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ILLUSTRATION BY FRANCIS BONDORNI, © 2011

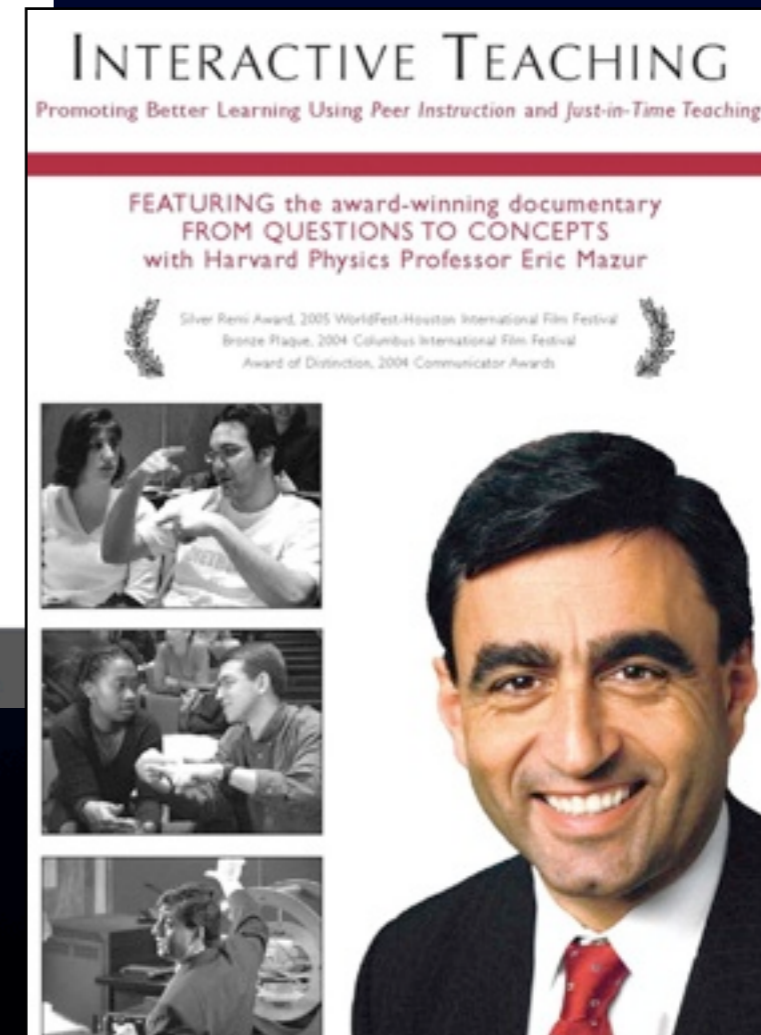
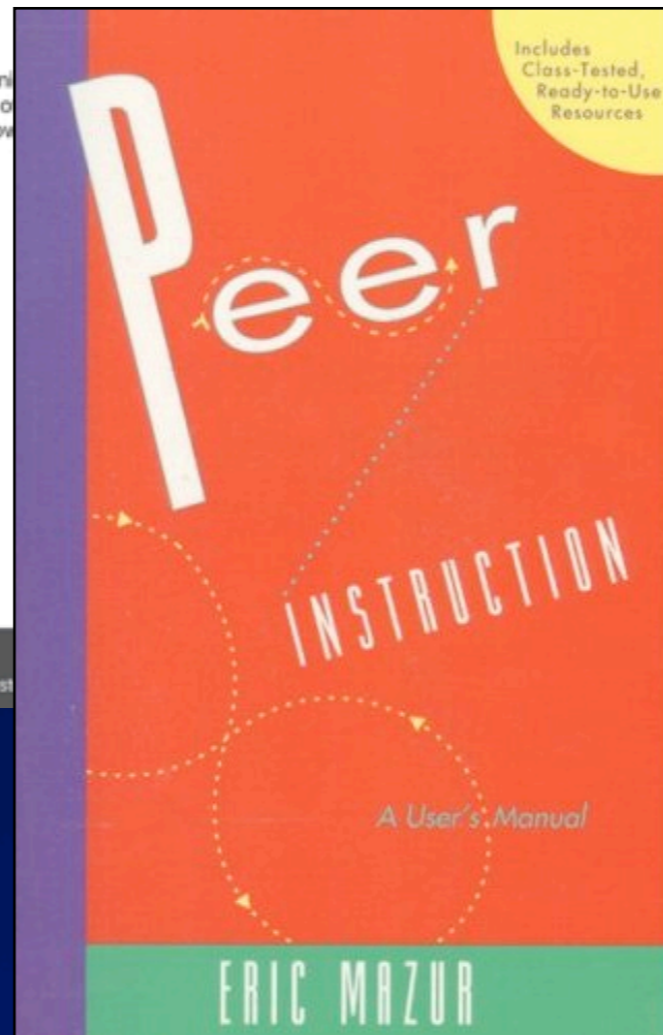
www.educause.edu/er

SEPTEMBER/OCTOBER 2011 EDUCAUSE REVIEW 31

(Long, P. & Siemens, G., 2011)

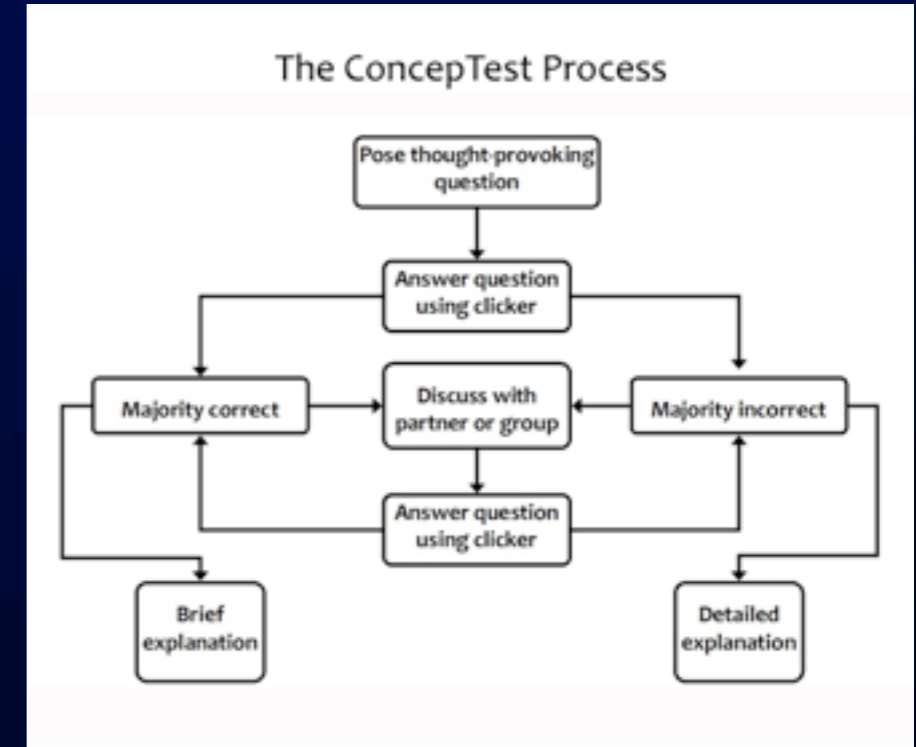
Peer Instruction by Eric Mazur @ Harvard

The screenshot shows the PeerInstruction.net website. At the top, there is a navigation bar with the site name and tagline 'CONNECT. SHARE. LEARN.', along with user options like 'Toru Iiyoshi | Edit Profile | Log Out' and a menu for 'SEARCH | ABOUT | BLOG | FAQ | CONTACT'. The main content area includes sections for 'About Peer Instruction Network', 'Peer Instruction Network' (describing it as a global community), 'Peer Instruction' (explaining the method developed by Eric Mazur), and 'Peer Instruction Network Team' (listing Julie Schell and Eric Mazur). A footer contains the Mazur logo and copyright information.



2,000+ Participants

Peer Instruction



learning catalytics
<https://learningcatalytics.com/courses/11/lectures/189>
 Brian Lukoff | Harvard University | Log out

learning catalytics

2. multiple choice A positively charged rod is held near a neutral conducting sphere as illustrated below. A positively charged particle is moved from point A to point B at constant speed. The potential difference from A to B is

Round 1
 74 responses, 61% correct

A. 61%
 B. 4%
 C. 35%
 D. 0%
 E. 0%

A. positive
 B. zero
 C. negative
 D. depends on the path taken from A to B
 E. cannot be determined without knowing more about the polarization induced in the sphere



Session	Date	Students	Performance
756634	Jan 26	69	
361741	Jan 27	79	
469645	Feb 1	85	
53041	Feb 3	80	
413304	Feb 8	84	
57383	Feb 15	76	
399757	Feb 15	81	
184135	Feb 22	76	
654520	Feb 24	68	
361195	Mar 1	75	
536946	Mar 3	66	
574963	Mar 8	67	
952795	Mar 22	73	
110566	Mar 24	68	
339504	Mar 29	69	
752448	Mar 31	63	
811106	Apr 5	64	
23821	Apr 12	58	
618994	Apr 14	61	
525160	Apr 19	66	
796079	Apr 21	69	

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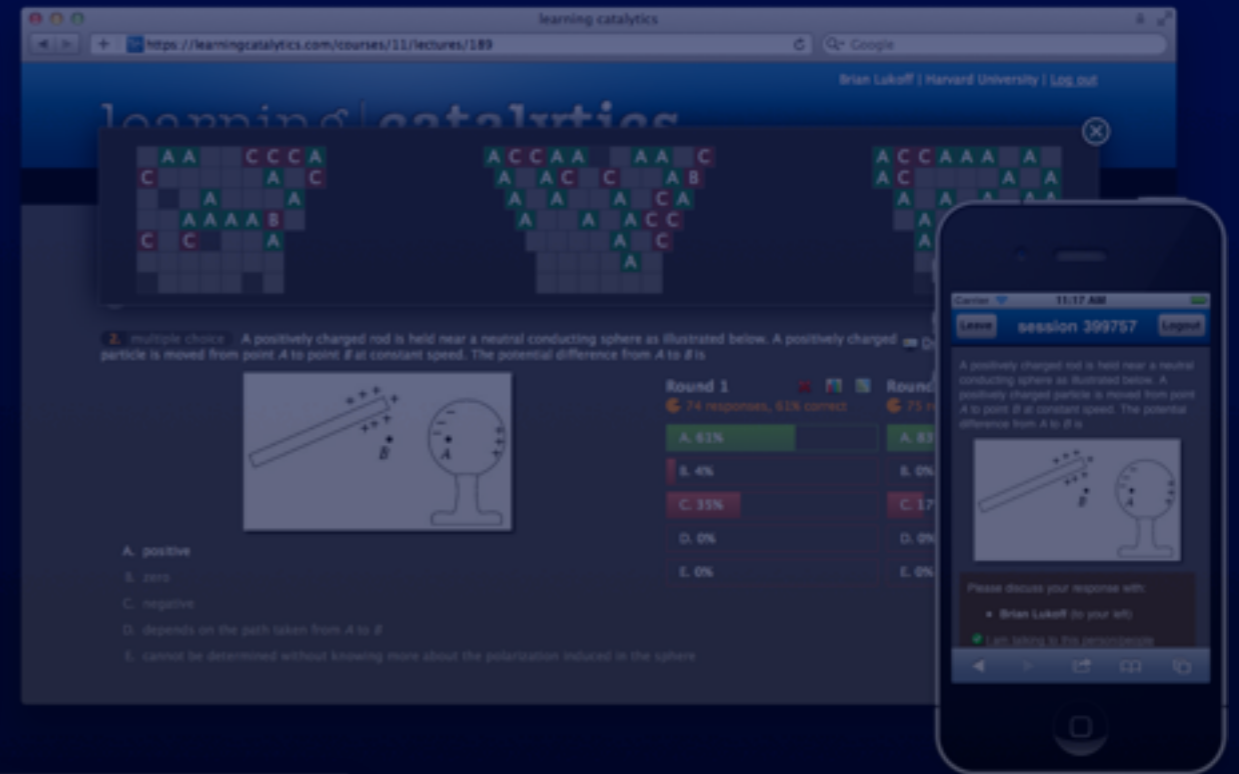
learning catalytics

Joe student
 physics 11b
 Back to all students in Physics 11b

Lecture	Session	Date	Students	Performance
Circuits I	811106	Apr 5	64	
Circuits II	23821	Apr 12	58	
AC Circuits I	618994	Apr 14	61	
AC Circuits II	525160	Apr 19	66	
Optics I	796079	Apr 21	69	
Optics II	388018	Apr 26	66	
Electric Fields	469645	Feb 1	85	
Gauss' law I	13041	Feb 3	80	
Gauss' law II	413304	Feb 8	84	
Electrostatic work and energy I	57383	Feb 15	76	
Electrostatic work and energy II	399757	Feb 15	81	
Charge separation I	184135	Feb 22	76	
Charge separation II	654520	Feb 24	68	
Magnetostatics	361195	Mar 1	75	
Magnetic fields of currents I	536946	Mar 3	66	
Magnetic fields of currents II	574963	Mar 8	67	
Changing magnetic fields I	952795	Mar 22	73	
Changing magnetic fields II	110566	Mar 24	68	
Changing electric fields I	339504	Mar 29	69	
Changing electric fields II	752448	Mar 31	63	

Showing 1 to 22 of 22 entries

学習情報分析を利用しアクティブな協調学習を最適化



教育版

”Minority Report”?

Prof. Eric Mazur's Group
@Harvard University

「ネット社会になり、情報はどこでも入手できる。そうになると、大学の使命は、学問を通じての師弟関係に収斂されていくのではないか」

- ピーター・ドラッカー

だが、その「師弟関係」すらもネットは変えつつある...



よりフラットな学びへ

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Meet students

Tired of studying alone? Connect with learners studying the same things you are.

Become a hero

Help students when they need it most and achieve legendary status among learners worldwide.

OpenStudy : Global Learning Community

Feedback

“The sense of ‘being connected’ was so incredibly real! ”

“It was so totally different from Yahoo!Q&A!”

検索 Q&A 検索 条件を指定して検索

すべてのカテゴリ 事件、事故

知恵袋トップ > ニュース、政治、国際情勢 > ニュース、事件 > 事件、事故

解決済みのQ&A

知恵コレに追加する



京大入試試験のカンニングについて

happyhoppy_kさん

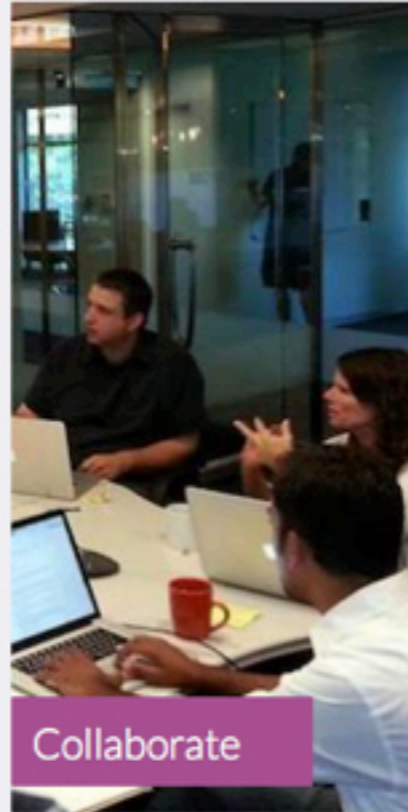
京大入試試験のカンニングについて
aicezukiという方が、試験中に携帯を使って
設問の回答について質問していたようですが
疑問にもった事があります。

1つめ。
多大な受験者の中から、この愚行者を特定する
ほぼ不可能ですよね…(恐らく)。
合格させてしまうのでしょうか??

2つめ。
あんな長文を短時間で携帯で打てるのしょうか
写メだと音で気づかれますし…

3つめ。
明らかにされたものがこの世には





NovoEd is the social online learning environment.

NovoEd partners with leading education institutions and corporations to offer collaborative, experiential online courses.



Learners
Join courses



Educators
Engage learners



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Cultivate talent

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Storytelling at Work

The Ariel Group

\$400.00



3D Printing in Manufacturing

Deloitte University Press

Free



Global History Lab, Part 2

Princeton University

Free

Highlighted Student Work



An awesome experience

01. The importance of listening to others. Whether I share my ideas with stakeholders or members of my team and/ or colleagues, I...



Fight The Stroke / Listen is first step of doing

We interviewed 10 doctors directly, 52 donors via online survey and 100 parents via Facebook community: here are our findings. The...



Another Journey Begins...

What's with the coffee? Read "Wake Up and Smell the Coffee" (Reflect on Your Mindset...



Week 2 Case Exercise Decision Tree

Take as given: The decision has been made to launch the new product new year. Decide now: Still can build case to not launch new...



TAREA 1. EJEMPLOS DE DECISIONES ESTRATÉGICAS



The University of MOOC's

SCHEMA: THE UNIVERSITY OF MOOC's Nowadays, children get bored in classrooms. The inefficiency of some teachers...

Reflections, Ideas and Thoughts

- Ownership of learning
- Teaching -> Learning -> Teaching
- Peer Instruction vs. Peer Assessment
- Diversity & multiple perspectives (e.g. “criss-crossed landscape”)
- Anatomy of teaching and learning
- Learning how to learn to solve new problems
- Collective capability vs. individual capability