

# Life



Stack fast enough, and you could break a sweat

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## EDUCATION

# Logging On to the Ivy League. Why top-tier universities are racing to give the public free online access to their best lecturers

BY ANDREA FORD

"DO YOU KNOW WHAT THE most complex mass of protoplasm on earth is?" Marian Diamond asks her students on the first day of anatomy class as she casually opens a flowery hatbox and lifts out a preserved human brain. "This mass only weighs 3 lb., and yet it has

the capacity to conceive of a universe a billion light-years across. Isn't that phenomenal?"

Diamond is an esteemed neuroanatomist and one of the most admired professors at the University of California, Berkeley. It would be a privilege for anyone to sit in on her lectures. And, in fact, anyone can. Videos of her popular course are

available free online, part of a growing movement by academic institutions worldwide to open their once exclusive halls to all who want to peek inside. Whether you'd like to learn algebra from a mathematician at MIT, watch how to make craw-

**Legendary lecturer** UC Berkeley biologist Marian Diamond

fish étouffée from an instructor at the Culinary Institute of America or study blues guitar with a professor at Berklee College of Music, you can do it all in front of your computer, courtesy of other people's money. In March, YouTube launched an education hub called YouTube Edu, dedicated exclusively to videos from the

Photograph for TIME by Kathrin Miller



more than 100 schools—ranging from Grand Rapids Community College to Harvard Business School—that have set up official channels on the site. Liberated from the viral stew of pop-culture vlogs and silly cat videos, the collection highlights how much free education is out there.

Why is YouTube going high-brow? The answer involves revenue (the Edu hub has room for one or two ads on its home page), social relevance and perhaps a bit of rivalry. More than 170 schools offer content free to the public on Apple's iTunes U, which originated in 2004 as a way for colleges to distribute content privately to their own students. The partnership has been a win-win: universities get a cost-cutting distribution tool, and Apple's products become must-haves on campus.

The bigger question is, Why have colleges started posting all this stuff at no charge? "Schools have always wanted to have their own area where they could be among their peer institutions and help with the discovery of their content," says Obadiah Greenberg, who leads the project at YouTube.

But producing content for global consumption can be hugely expensive. MIT, an open-courseware pioneer that since 2002 has published text materials such as lecture notes and syllabi for about 85% of its curriculum, spends more than \$10,000 per course to compile, publish and license text materials; classes with videos cost twice as much.

Yet MIT's Steve Carson, who serves as president of the OpenCourseWare Consortium, says it's worth the expense, since the online content attracts prospective students, keeps alumni connected and encourages innovation. Schools have decided that these benefits outweigh the concerns about cost, intellectual property and devaluation of elite degrees. After all, the free material does not add up to a diploma, and viewers can't interact with the faculty.

## A Few of Our Favorites. These lecturers engage and entertain



*Walter Lewin, MIT*

**PHYSICS: CLASSICAL MECHANICS**

**AVAILABLE ON:** YouTube Edu, iTunes U, Academic Earth

**HIGHLIGHT:** A death-defying wrecking-ball trick

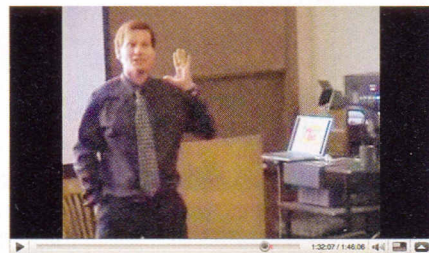


*Amy Hungerford, Yale University*

**ENGLISH: THE AMERICAN NOVEL SINCE 1945**

**AVAILABLE ON:** YouTube Edu, Academic Earth

**HIGHLIGHT:** Musings on Jack Kerouac's mystique

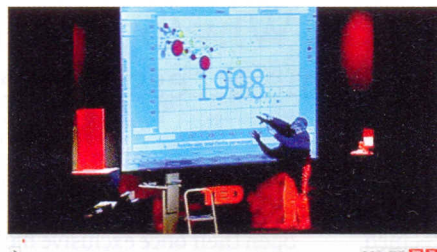


*Martin Lewis, Stanford University*

**HISTORY: GEOGRAPHY OF U.S. ELECTIONS**

**AVAILABLE ON:** YouTube Edu, iTunes U

**HIGHLIGHT:** A dissection of red and blue states



*Hans Rosling, Gapminder Foundation*

**STATISTICS: DEBUNKING THIRD-WORLD MYTHS**

**AVAILABLE ON:** TED.com

**HIGHLIGHT:** An insanely cool-looking statistics slide show

The volume of YouTube Edu's content, which includes campus tours and other non-academic material, can be overwhelming, but the view-count sorting feature helps users quickly locate must-see videos, which they can comment on and rate on a five-star scale.

Another new site, AcademicEarth.org, lets users give lectures letter grades. (Diamond's brain-in-a-hatbox episode, posted there as well as on YouTube Edu, got an A average.) The much smaller, more closely edited site also assembles playlists of related lectures, like one titled "Wars Throughout History." Richard Ludlow, 23, came up with the idea for the site when he was struggling with an algebra course at Yale and discovered helpful Web lectures by the author of his textbook, MIT professor Gilbert Strang. Ludlow thinks every school should play more to its strengths and not be shy about letting a professor rely on a rival's superstar lectures. "That way, the students get a great lecture experience, and the professor has more time for question-and-answer," he says.

There is clearly a big appetite for all kinds of online lectures, as shown by the popularity of sites like TED.com, which broadcasts talks given by innovators in the fields of technology, entertainment and design. But one of the most interesting consequences of open courseware may be its impact on teachers, who have a new way to get feedback—and exposure.

"It used to be that research was No. 1. Now people are working harder to be better teachers," Diamond says. Sifting through e-mails, the 82-year-old professor reads over messages she's saved from students and teachers who watched her lectures from as far away as England and Egypt. "At this time of life, when everybody else is retiring and stepping aside, thinking they've done it all, you're getting this worldwide connection. It's beautiful." ■