INTRODUCTION

In April 2001, almost exactly 11 years ago, MIT announced that it would make the teaching materials from all its classes freely available online for use by anyone in the world. This program was called OpenCourseWare.

The OpenCourseware idea was proposed by a faculty committee that had been asked by the MIT President and Provost to examine how the Institute might use the Internet to advance education.

OpenCourseWare became the expression of MIT's vision that education around the world could be advanced through a global community that openly shares knowledge and ideas.

Since 2001, 80% of our teaching faculty have voluntarily given materials to OCW and this has allowed us to construct a large web site with thousands of free educational resources from MIT classes.

In the process, MIT has inspired a global movement towards open sharing of educational resources by other universities, colleges and institutions, corporations, and individuals – even some commercial publishers. The quantity of free and open educational content now available on the network is amazing, and growing.

Important to know what OCW is and what OCW is not. OCW is a free open web publication of MIT content. It is **not** MIT education. It is **not** online courses. There is no access to teaching staff. There is no certificate or credit.

Free content is **not** the same as education but we have seen that quality open resources can accelerate & enrich education when combined with good teaching.

Site Tour

MIT OpenCourseWare is a free and open publication of teaching materials used in MIT classrooms. There is **no registration** for the site, and all course materials are **free to use, distribute**, and **modify** for non-commercial purposes.

We currently have materials for over 2100 MIT courses online, covering **all schools and departments** at MIT. This includes courses in areas that MIT is famous for – such as engineering, science, and technology -- as well as courses in

management**,** social sciences, humanities and the arts, and architecture and planning.

Available courses span MIT's entire undergraduate and graduate curriculum.

Courses are published on OpenCourseWare **after they have been taught at MIT**. You'll find some courses that were taught ten years ago, that are just as relevant today, such as Classical Mechanics [1999] MIT's Introductory Physics course, taught by Professor Walter Lewin, -- and one of our most popular courses.

But you'll also find courses taught more recently on timely specialized topics like the 2008 world financial crisis, climate adaptation, game design, sustainable energy, and repair of the Hubble telescope.

Some courses, especially those in introductory science and engineering areas – have wide appeal to learners around the world. Other courses – in advanced topics -- may be of interest to a small number of academics in that area.

Courses vary in terms of the content available on OCW -- this is based on the type of course (lecture, lab, small seminar, studio or project course) and what the individual faculty member is willing to make available. OCW is voluntary on the part of faculty and they decide what they want to share.

Content in an OCW course may include a course syllabus, lecture notes, reading list, online textbook, homework assignments exams, projects, image collections, and multimedia resources such as applets, simulations, or audio or video lectures.

Let's take a look at this Mathematics course in Differential Equations course. This course is typically taken by MIT students in their second year.

Materials in OCW courses show educators how they might teach a similar topic: how many times the course met each week, the topics covered during each session and the types of materials used for teaching and for student activities.

Educators will also find supplemental materials that they can refer their students to.

Many educators tell us that they actually use OCW most frequently to enhance their own understanding of a topic in preparation for their own teaching.

Students enrolled at other schools use OCW to help them with courses they are taking or to increase their knowledge of a topic outside their formal course of study.

Independent learners can brush up on skills or tackle entire new subjects in a self-paced way with our video lectures. Many learners use OCW more as a reference library rather than working through an entire semester-long course from beginning to end.

Many OCW courses contain assignments and a few also contain solutions, so learners can practice what they've learned.

MIT students use OCW to plan their workload or review concepts they learned during previous semesters, or to explore a topic they didn't understand from one of their current classes.

Courses can be downloaded for offline use. Just click the link, save to your computer and extract the contents. It's all the same material as what you see online, except we leave out video and audio files to keep the file from getting too large. Y**ou can download those files from our partner sites, like iTunes U**, or the Internet Archive.

OCW contains a wealth of multimedia resources, including interactive "applets", visualizations and simulations for teaching physics and math – some of which were demonstrated yesterday in the physics workshop -- and video and audio of MIT faculty lectures.

We have collected **all courses that have video or audio resources** in one list. Over **50 courses are now available with video** or audio of faculty lectures.

Many of our videos lectures have transcripts and subtitle tracks which are useful for the hearing impaired and users for whom English is a second language.

Some OCW courses have been translated into other languages by independent affiliate organizations. There are now hundreds of course translations in Chinese, Spanish, Portuguese, Turkish, Thai, and Persian.

We have developed **two special areas of our site for key audiences**.

For self-learners **interested in studying foundation-level courses in Physics, Mathematics, Chemistry, Microeconomics, Computer Science or Electrical Engineering on their own**, we've designed a small collection of **self-paced courses that we call OCW Scholar**, first introduced in 2011.

These courses include additional new materials developed by MIT teaching staff specifically for learners studying on their own. The materials in these courses are more complete than typical OCW courses and are organized in learning modules that enable learners to move through at their own pace.

We've made an effort in these courses to add more problem solving materials such as worked problems and solutions, and video recitations where teaching staff work through problems relevant to the module.

And OCW Scholar courses link to online student study groups on OpenStudy so that learners can connect with others using these same materials.

While OCW Scholar courses were developed for independent self-paced study, the modular, sequential format and relatively complete content in these courses provide a teaching framework that educators can adopt in part or in whole for use in formal classroom instruction.

There are now ten courses available in the Scholar collection. Two additional courses in Introductory Biology and Introduction to Psychology will be available in the few months. We plan to produce a total 20 courses in the Scholar collection by 2014.

For **high school student and teachers** we have Highlights for High School. There you'll find a list of introductory MIT courses, course and resources specifically designed for high school students, and materials organized to help those taking US Advanced Placement high school courses in Biology, Chemistry, Physics, or Calculus.

OCW publishes materials from 50 new MIT courses every year, and we update 100 older courses annually with new material. So check back regularly for updates.

Many of our course lists are available as **RSS feeds**. You can subscribe to these feeds in academic areas of interest to you so that you can be alerted as new courses in these areas are developed.

For areas of the world where bandwidth resources are limited, we offer a Mirror Site program.

Through this program the contents of the entire OCW web site are hosted by other organizations such as universities and NGOs, who provide educators and learners in their areas with local access to the same OCW resources that are available on the MIT OCW web site.

We currently have over 350 mirror site locations around the world – including several that are being set up here in Haiti.

In fact, this site tour has been done using this mirror disk -- not the Internet.

We have a **monthly electronic newsletter** that contains a list of recently-published courses, alerts about site features, and stories of how our content is used by people around the world. You can sign up on the OCW web site from this link on the Home Page.

Explore the site on your own time. Find a topic you're interested in. Watch a video lecture. Try a practice problem. We love to hear stories of how people, especially educators, are using OCW and we also appreciate feedback and suggestions for improvement. You can contact us by emailing ocw@mit.edu.

If you don't find exactly what you're looking for on the MIT OCW site, I encourage you to explore other OpenCourseWare sites provided by academic institutions around the world that have joined MIT in committing to share their own educational resources openly.

Over 250 institutions are now members of the OCW Consortium. And, there are over 15,000 courses available from these institutions.

You can find a list of the other OCW sites at the OCW Consortium web site located at ocwconsortium.org.