

Opencoursewares: A Necessary Component for Creating a
Fully-inclusive and Open Information and Knowledge Society

Faculty around the world currently use external resources to improve the quality of their teaching. Opencoursewares, by enabling open and free access to high-quality digital course materials, not only help facilitate this process, but are also an integral component for creating the Information Society as defined in Section 1 of the *Political Chapeau*. This society is one in which “people everywhere can create, access, utilize, and share information and knowledge, to achieve their full potential and to promote sustainable development, (and) to improve the quality of life.” In order to create such a society, one which improves the quality of education around the world, promotes the development of friendly relations between nations, and allows people to improve the quality of their lives by widening access to knowledge, all nations must take part in the open sharing of educational content.

Many institutions around the world cannot afford or attract a world-class faculty, but with free and open access to high-quality, digital materials, faculty members can plan, develop, and teach courses that are on par with world-class standards, thereby improving the overall quality of teaching around the world. In this sense, opencoursewares help uphold the principles of solidarity as described in the United Nations Millenium Declaration. Nations who benefit the most, i.e. can afford to employ world-class faculty and have access to world-class knowledge, can share their educational wealth with those nations who need it most.

Similarly, opencoursewares engender interdisciplinary collaborations which contribute to economic, social, and cultural development, and promote mutual understanding among nations. Just at MIT, a structural engineer discovered the work of a colleague in ocean engineering through the MIT OpenCourseWare website and incorporated that material into a book on wave vibration¹. The adoption of the opencoursewares idea by nations around the world will only increase the diversity and magnitude of potential positive worldwide impacts of such collaborations. These collaborations as well as open and free access to the educational materials from around the world promote mutual understanding between nations. Nations can combine their respective knowledge and expertise in order develop greater cultural understanding among all nations and to collectively address world problems such as hunger, poverty, and sustainable development. Additionally, in addressing these problems, opencoursewares will be upholding the Universal Declaration of Human Rights principle of promoting understanding, tolerance, and friendship among all nations and the United Nations Millenium Declaration principle of actively promoting a culture of dialogue among all civilizations.

Finally, Opencoursewares are necessary for improving the quality of lives of students who would otherwise lack access to the knowledge and education because of cost, geography, politics, or culture. Saman Zarandioon, an Iranian refugee living in Vienna, studied a course on the MIT OpenCourseWare site in order to continue an education that was stalled by the Iranian government². When I taught this summer in Kenya with a team of MIT students as part of the Africa Internet Technology Initiative (AITI), I found that

¹ Vest, Charles. "Why MIT Decided to Give Away All Its Course Materials via the Internet. Chronicle Review. January 30,2004.

² Diamond, David. "MIT Everywhere." Wired Magazine. Issue 11.09. September 2003.

the unavailability of certain course material hindered the progress of the students at the university where we taught. Our team taught an intensive, MIT-style, 6-week course in Java programming and entrepreneurship to first and second year students at Strathmore University in Nairobi, Kenya. Some of the students had previously been exposed to computer programming languages, but the entrepreneurship portion of the course was a brand new experience, which the students felt was the most valuable aspect of the course. The students were required to think critically about problems present in their communities and ways of addressing those problems, as well as services they could provide that would generate revenue. They had to write business proposals, give sales pitches, and present on their findings. The students told us that this was the first time they actually had to come up with their own business ideas, research on their business competitors, analyze the feasibility of their entrepreneurial venture, and most importantly, convince others to invest in their companies (i.e. sell themselves). The students felt that these were skills that they needed to possess to become employed in the local cities as well as around the world but were not stressed in other university courses. This case illustrates that Opencoursewares are aligned with the vision of the United Nations Millenium Declaration because they provide young people with a real chance to find decent and productive work. Both of the previous examples highlight just two obstacles that students around the world face in accessing knowledge and improving the quality of their education. Therefore, by making the world adopt opencoursewares, we are reaffirming our commitment to removing all obstacles to bridging the digital divide (Section 9, *Political Chapeau*) and ensuring that all students have the necessary tools to obtain quality employment and improve their own lives.

In conclusion, opencoursewares are a necessary building block for creating an Information Society that allows its members to access and share knowledge regardless of geography, politics, and culture and to then use that knowledge to achieve their full potential and improve the quality of their lives. Institutions that cannot afford or attract a world-class faculty can use opencoursewares to improve their quality of teaching and advance education to world-class levels. Opencoursewares provide students, teachers, and people around the world with access to information that can help improve their lives but would otherwise be unavailable to them. With opencoursewares, nations around the world can expand the base of human knowledge, take part in a rich cultural exchange, and collaborate in ways that contribute to economic, social, and environmental development, and address problems that people face around the world. Nations must partake in the open sharing of educational content in order to create a fully-inclusive and open information and knowledge society as envisioned by the World Summit on the Information Technology.