Benefits, Challenges, and Sustainability of OpenCourseWare

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Abstract
OpenCourseWare movement, spearheaded by world renowned higher education institution has been in the center of heated debates for its validity and sustainability. Although it is a young movement, it has hundreds of institutions worldwide participating in the movement, and many forecast that open educational resources will secure itself to be a mainstream movement in a couple years. This paper examines what benefits OCW can offer to institutions, what challenges are pressing, and what should be done in order to find sustainability for the movement.

Keywords
OpenCourseWare, OCW, Open Educational Resources, OER, sustainability

Introduction
OpenCourseWare was and still is a very debatable concept in the world of Academe. Charles Vest, the former president of MIT, did not idly call that school’s decision to adopt OCW a ‘counterintuitive’ one. From day one, questions have been made as to its intrinsic merit, whether it would yield a favorable ROI for the university, and whether it is ultimately sustainable.

1 What is OpenCourseWare

In 2001, MIT made a decision to open up all of its course materials and offer them online for free. MIT received about 32 million dollars in grant money for the project and set forth a venture that many thought was impossible due to its scale. It has since reached the milestone that it had promised with the full-complement of 1800 courses having been made available by 2007. Since that initial launching, more than 250 institutions worldwide have come together for the common goal of opening up education in the OCW Consortium. In the Consortium all told, there are now 13,000 courses and counting. The membership consists of countries from every continent, and there are courses in languages as diverse as Russian, Turkish, and Arabic.

Figure 1: Growth of OCW Courses

http://www.ocwconsortium.org

1.1 Significance
So what is the significance of all this? Information and communication technology has brought forth changes in different parts of the society. Education is not an exception, and educational technologies have much changed the way we teach and learn. However, for those of us who spend the most of the day thinking about how to innovate the way we teach and learn, changes are more than what meets the eye. The changes are not only in that we now have more means to deliver educational contents. The changes are in that higher educational institutions must now meet the demand of the knowledge based economy, making a transition from meeting that of the industrial economy. We all know that the fundamental duty of a post secondary institution is to create knowledge. However, in the knowledge economy, we must think about knowledge creation and digital contents in a different light.

The past decade saw a tremendous growth in Open Educational Resources (OER). OER is not confined to educational contents; it includes technology and licenses that enable provision of open contents. Of OER, OpenCourseWare is the staple type of contents in post secondary educational institution. OpenCourseWare is high quality educational material organized as courses, offered online for free. We say these are open not because they are
offered at no cost, but because they employ open licenses such as Creative Commons. It has been repeatedly misrepresented in the media as a network of free online courses, but it is not a free distance learning initiative. There are no degrees granted, and no faculty feedback is given to assist learning. It is better to think of it as courseware unburdened from formal application and accreditation. The courseware typically may include syllabi, reading lists, lecture notes, exam questions, videos and audio files of lectures. Users come from all over the world. Thousands of teachers, students, and self learners visit OCW sites everyday.

2 Benefits and Challenges

Although anthropological data has long shown that givers of gifts are happier than their recipients, is there no other data beyond this “warm glow”? Underneath all the talk about the philanthropic good, it would have to be considered irresponsible if we did not consider what is in it for the university. Then what is in it for university administrators, faculty and students? That is not an easy question to answer at first glance. It is true, however, that according to a survey conducted on MIT faculty and students in 2007, 30% of the professors thought that opening up the course improved their teaching materials and structure.

Table 1: Benefits of OCW Publication

<table>
<thead>
<tr>
<th>Benefit</th>
<th>% agree</th>
</tr>
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<tbody>
<tr>
<td>Increased quality or organization of course materials</td>
<td>30%</td>
</tr>
<tr>
<td>Increased level of comfort with use of the web in teaching</td>
<td>29%</td>
</tr>
<tr>
<td>Allowed me to rethink my teaching approach</td>
<td>26%</td>
</tr>
</tbody>
</table>

84% of the faculty and 93% of the students use OCW at MIT. 88% of the undergraduate students who visit the site do so in order to use as a supplement to the lectures, and 52% of them use the site to decide what course to take. These are very simple indicators towards improvement of teaching and learning.

Table 2: OCW Impact on Student Experience

<table>
<thead>
<tr>
<th>Impact</th>
<th>UG</th>
<th>Grad</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely positive impact</td>
<td>65%</td>
<td>53%</td>
<td>58%</td>
</tr>
<tr>
<td>Positive impact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderately positive impact</td>
<td>33%</td>
<td>42%</td>
<td>38%</td>
</tr>
<tr>
<td>Somewhat positive impact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No positive impact</td>
<td>2%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

One of the most important issues here is transparency. One astonishing impact of the information technology has been governments becoming more transparent. So did corporations. We saw the fall of many giant corporations which could not withstand the transparency test of the people. And now, education is up for the challenge. Opening courses up allows for greater transparency of our education. It urges transparency in individual classrooms, departments and the university. What we can look forward to is an improvement of quality as things to open. Students may take advantage of open courses to see whether the course is the right one for them, and use them to preview and review to enhance learning experiences. Whereas the faculty did not know about what the others were teaching before, they can now use the open contents to see what the students were taught, accurately assess the students, and advise them accordingly.

Another benefit is that more collaboration can result from opening of the course. Jasper Verberk of TU Delft provided his water management course as OpenCourseWare, and this led him to do a project with ITB Bandung of Indonesia. Professor Verberk received a grant from EVD to record what would be used as the core curriculum. Local lecturers will collaborate to localize the course. More universities will join the program, opening doors to more international collaboration for improved pedagogical practices.

OCW faces many challenges as can readily be imagined. One of the criticisms is that although it claims to be of service to developing countries, it only worsens the digital divide by letting those who have access to the network take full advantage of the material. Some go even further to say that because the majority of the courses are in English, it is an extension of cultural imperialism, that this also deepens what is now called the "English divide". However, one must not neglect the fact that OpenCourseWare is a movement in progress. We have only begun initial steps of what OpenCourseWare should look like. For this to resemble the mechanism of a true Web 2.0, we have yet to give the users enough time to use, reuse, remix and redistribute. At the heart of open contents is the rip, mix and share culture. There are various groups all over the world who works on translation of the material into local languages, and many of these projects are run by volunteers. OOPS of Taiwan, the Russian OCW, and many others are fostering the making of derivatives of open contents by translating. We are going towards the direction
of being true to knowledge creation in the knowledge based economy. We are getting more people making different attempts at utilizing OCW for a more pedagogically sound teaching methods. All the concerns raised are being answered by not only institutions, but by individuals who are dedicated to education.

3 Sustaining the Movement

As funding that early adaptors of the movement had the privilege to is not available to all institutions, sustainability of the movement is a very important issue. Some are looking into reducing production costs, and some others look into revenue generating activities on the website to keep it sustainable. However, the best and possibly the most difficult way to achieve sustainability would be to have the mechanism for production of knowledge and opening that up to the world be a part of the university culture. OpenCourseWare is not an initiative of a selected few prestigious universities to do social good. It is a part of the future of education in the digital age: open courses, open journals, and open systems leading to open education. In order to move towards this, an institution must continually find ways to increase awareness of openness and sharing among faculty and students. Learning management system should be designed to accommodate openness. Pedagogical practices should be geared towards openness and collaboration.

References


