

Cambridge International Conference on Open and Distance Learning 2009:  
Supporting learning in the digital age: rethinking inclusion, pedagogy and quality

*Open Educational Resources: Building Knowledge Societies*

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*At the heart of the movement towards Open Educational Resources is the simple and powerful idea that the world's knowledge is a public good and that technology in general and the Worldwide Web in particular provide an opportunity for everyone to share, use, and reuse it.<sup>1</sup>*

In this presentation I am going to reflect upon Open Educational Resources and their potential in building knowledge societies by increasing access to knowledge, and thereby supporting learning in a digital age in an inclusive manner.

But first I will put the topic in the context of UNESCO and the challenges of Member States. And before that I am going to give a personal reflection that will introduce the thread of my presentation.

1. Introduction

*A personal perspective*

*Indistinct, majestic, ever-present, the tacit architecture of that infinite Library [of Alexandria] continues to haunt our dreams of universal order. Nothing like it has ever been achieved, though other libraries (the Web included) have tried to copy its astonishing ambition.<sup>2</sup>*

As a very small child, I was enchanted with books and being read to. The fat books with only few drawings held their messages to themselves while I was too young to read. Those books were read to me by my father as he read us both to sleep in my bedroom under the eaves at the top of my grandparent's house in Toronto. My father – the reader – was the first key to opening those books, their stories and knowledge.

As an older child and by then a reader myself, I was allowed to cross the park in front of the house, and wander freely through the children's library that was housed in a lovely old gray stone building. Here, I began to sense there was an order that allowed one to find what one wanted by something other than size or colour.

Later, the Dewey Decimal System and the card catalogue provided the key to unlock the library and its knowledge. Having completed my university degree, that love of books and reading made me consider becoming a librarian, and I went to work as a librarian candidate in the lovely old gray stone building that housed the main library of the small provincial city in which I had passed my university years – also, I might note, in beautiful gray stone buildings.

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<sup>1</sup> Smith, M.S. and Casserly, C.M. 2006. The promise of Open Educational Resources. *Change*, Vol. 38, No. 5, pp. 8-17.

<sup>2</sup> Manguel, A. 2006. *The Library at Night*. Toronto, Alfred A. Knopf Canada, p. 24.

Assigned to the children's library, I found again many of the books I had been read so many years ago and snuck about the stacks searching for the rest, whenever time allowed. I did not become a librarian, but read to my own child each night until she herself was ready to read and, in fact, create her personal library by ordering and cataloguing her own books.

Books, and the libraries in which they dwell, have always been favourite spaces and places for me, but also bookstores. And so, when dawdling in a bookstore of the Toronto airport and happening upon a book entitled, *The Library at Night*, I picked it up immediately to take home to Paris. Its author, Alberto Manguel, is an Argentinean who lived in Toronto for some time before moving to France where he created his own library in what I, myself, envision as a very old gray stone building.

Musing about the origins of the library in the opening chapter of the book, "The Library as Myth", he invites the reader to reflect on two buildings that he says stand for everything we are – the Tower of Babel and the Library of Alexandria:

*The first, erected to reach the unreachable heavens, rose from our desire to conquer space, a desire punished by the plurality of tongues that even today lays daily obstacles against our attempts at making ourselves known to one another. The second, built to assemble, from all over the world, what those tongues had tried to record, sprang from our hope to vanquish time, and ended in the legendary fire that consumed even the present.<sup>3</sup>*

It is the second concept that I want to consider in this presentation – how we may enhance access to knowledge to enable the development of inclusive knowledge societies.

### *A UNESCO perspective*

*Since wars begin in the minds of men,  
it is in the minds of men that the defences of peace must be constructed.<sup>4</sup>*

UNESCO, the United Nations Educational, Scientific and Cultural Organization, was founded in 1945 with an overarching goal – to build peace in the minds of men. Working to attain this goal, UNESCO takes action in the fields of Education, Natural Sciences, Social and Human Sciences, Culture, and Communication and Information.

As the United Nations' specialized agency for education, UNESCO has worked since its creation to improve education worldwide. The states that were party to its constitution articulated their belief "in full and equal opportunities for education for all, in the unrestricted pursuit of objective truth and in the free exchange of ideas and knowledge".<sup>5</sup> Its close links with education ministries and other partners in 193 countries place the organization in a key position to press for action. The Organization works for a sustainable world with just societies that value knowledge, promote a culture of peace, celebrate diversity and defend human rights, achieved by providing education for all.

The initial focus of the Education for All movement was on ensuring basic education for all children, however, education is a system of interconnecting parts that of course impinge on

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<sup>3</sup> Ibid., pp. 18-19.

<sup>4</sup> UNESCO. 1945. *UNESCO Constitution*. Paris, UNESCO. Retrieved 2 September 2009 from [http://portal.unesco.org/en/ev.php-URL\\_ID=15244&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/en/ev.php-URL_ID=15244&URL_DO=DO_TOPIC&URL_SECTION=201.html).

<sup>5</sup> Ibid.

one another. Increasing enrolment in elementary education inevitably results in pressure on secondary education, and so on. The recent UNESCO World Conference on Higher Education stressed once again the important role of higher education. Entitled “The New Dynamics of Higher Education and Research for Social Change and Development”, the conference examined a broad range of issues and topics, and underlined the fact that higher education is, and must remain, a public good.

Education systems reflect the societies they serve, but each is unique and therefore they are diverse. The UNESCO World Report of 2005 put forward the concept of knowledge societies, noting that the plural points to the need to recognize and accept that diversity.

*The aims associated with the desire to build knowledge societies are ambitious. Providing basic education for all, promoting lifelong education for all, encouraging the spread of research and development efforts in all countries of the world ... – all these efforts towards the participation of all in knowledge-sharing and the establishment, even in the most disadvantaged countries, of a true knowledge potential, represent a considerable undertaking. Are such ambitions within reach?*<sup>6</sup>

If this was a challenging question in 2005, it is all the more so now with the overlay of the financial crisis on these objectives. Writing to the Group of 20 nations that met in April 2009, the UNESCO Director-General urged world leaders to address financial problems as well as the fundamental issues that determine long-term economic development, such as education.

*Expenditure for education is one of the most productive investments that a country can make. ... By injecting resources into education now, not only would we stimulate economic recovery, but we would also contribute to stronger growth in the future and guarantee global stability in the long term. This is why UNESCO proposes including education on the agendas of all international meetings aimed at resolving the current crisis.*<sup>7</sup>

But will countries be able to heed this advice? Just at the moment, when more and more is expected of education systems in emerging knowledge societies, the societal means of reaching the objective of education for all may be severely compromised.

New dynamics will be needed indeed.

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<sup>6</sup> UNESCO. 2005. *Towards Knowledge Societies*. UNESCO World Report. Paris, UNESCO. p. 186.

<sup>7</sup> UNESCO News Service. 2009. UNESCO Director-General to G-20: “Invest in education”. 1 April 2009.

## 2. Opening Education

### *Open and distance learning*

*I was persuaded that the standard of teaching in conventional universities was pretty deplorable. It suddenly struck me that if you could use the media and devise course materials that would work for students all by themselves, then inevitably you were bound to affect – for good – the standard of teaching in conventional universities.”<sup>8</sup>*

Open and distance learning has played a significant role in the trend to open education to more learners. But surely it must play a much stronger role within education systems, given the challenges they currently face. The goals of Education for All and lifelong learning cannot be met by traditional methods based on face-to-face classroom teaching and learning.

The Open University of the United Kingdom was founded as an institution that would be open – open to people, places, methods and ideas. It represented a means to increase access to higher education. But Sir Walter Perry, the first Vice Chancellor, made the prescient comment above when stating why he was initially interested in the new university. Not only do open universities serve to increase access, but their methods and experience have much to contribute to the provision of education for all in the 21st century.

### *Technology*

Various technologies have served and continue to serve both conventional and distance learning institutions, and their learners to make education more accessible, more flexible and more open. But perhaps none has had the impact of the Internet and the Web.

John Seely Brown, former Chief Scientist of the Xerox Corporation, writing about learning in a digital age, suggested electricity as an apt analogy for the impact of the web.

*In 1831 Michael Faraday built a small generator that produced electricity, but a generation passed before an industrial version was built, and then another 25 years before all the necessary accoutrements for electrification came into place – power companies, neighbourhood wiring, appliances (like light bulbs) that required electricity, and so on. But when that infrastructure finally took hold, everything changed – homes, work places, transportation, entertainment, architecture, what we ate, even when we went to bed. Worldwide, electricity became a transformative medium for social practices.*

*In quite the same way the World Wide Web will be a transformative medium, as important as electricity ...*

*The Web has just begun to have an impact on our lives. As fascinated as we are with it today, we’re still seeing it in its early forms. ... My belief is that not only will the Web be as fundamental to society as electrification, but that it will be subject to many of the same diffusion and absorption dynamics as that earlier medium.<sup>9</sup>*

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<sup>8</sup> The Open University. 2009. About the OU: history of the OU. Retrieved 11 August 2009 from <http://www.open.ac.uk/about/ou/p3.shtml>.

<sup>9</sup> Brown, J.S. 2000. Growing up Digital. *Change*, March/April 2000, pp. 11-20.

Taking this analogy, we can barely perceive the potential impact of this technology on education. We are just beginning to conceive of the possibilities of this medium for supporting learning and building knowledge societies. In spite of the inherent conservatism in education systems, new dynamics are emerging. A convergence in methods of teaching and learning that blends the attributes of both face-to-face and distance education is becoming more prevalent. And there is currently another convergence, that of:

- increasing connectivity worldwide,
- the growing pervasiveness of low-cost devices such as mobile phones and inexpensive laptop computers,
- increasing availability of openly licensed educational content.

Sir John Daniel has described the iron triangle of access, cost and quality that has hindered the expansion of education in a classroom setting throughout history. As access or quality is improved, costs rise as well. But, he contends, technology can transform the iron triangle into a flexible one through the principles identified by Adam Smith – division of labour, specialization, economies of scale and the use of machines and communication media.<sup>10</sup>

And this is just what open and distance education has achieved.

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<sup>10</sup> Daniel, J. 2009. Internationalization, regionalization and globalization: breaking out of the iron triangle. Speech to the UNESCO World Conference on Higher Education, UNESCO, Paris, France, 6 July 2009. Retrieved 10 August 2009 from <http://www.col.org/resources/speeches/2009presentation/Pages/2009-07-06.aspx>.

### 3. Open Educational Resources

*The rise of the Open Educational Resources movement is one of the most exciting, and indeed critical, developments of our time.*<sup>11</sup>

#### *A vision*

In 2002, a group of academics largely from developing countries was convened at UNESCO to consider a new development at the Massachusetts Institute of Technology – OpenCourseWare. The group found this effort to make available all MIT course materials on the web to have great potential for education and expressed “their wish to develop together a universal educational resource available for the whole of humanity”.<sup>12</sup> It was at this meeting that the term “Open Educational Resources” was coined and defined as:

*The open provision of educational resources, enabled by information and communications technologies, for consultation, use and adaptation by a community of users for non-commercial purposes.*<sup>13</sup>

The term has evolved to include “teaching and learning resources that reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others”.<sup>14</sup>

UNESCO’s commitment to building knowledge societies is congruent with its support for building awareness of the concept of Open Educational Resources (OER), which constitute a powerful example of “shared knowledge” and a means to making available worldwide freely and openly available educational content.

The development of OpenCourseWare at MIT and the UNESCO meeting were both supported by the William and Flora Hewlett Foundation, which has played the role of champion in the OER movement. The 2002 strategic plan of the Foundation included a new component, “Using Information Technology to Increase access to High-Quality Educational Content”. The rationale given for this component resonates with the comment of Walter Perry cited earlier:

*The focus of this component is on creating exemplars of academic content that are free and accessible to all on the web. ...these exemplars ... will help raise the level of quality of academic content by setting a standard of practice ... One criterion for our support of education content made freely available on the web is that it must set*

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<sup>11</sup> Gourley, B. 2009. Higher education for a digital age: a view from the north. Speech at M-2009, Maastricht, the Netherlands, 8 June 2009. Retrieved 2 September 2009 from [http://www.open.ac.uk/vice-chancellor/Speeches\\_3a00\\_Publications/Speech/Higher\\_education\\_for\\_a\\_digital\\_age:\\_a\\_view\\_from\\_the\\_north.html](http://www.open.ac.uk/vice-chancellor/Speeches_3a00_Publications/Speech/Higher_education_for_a_digital_age:_a_view_from_the_north.html).

<sup>12</sup> UNESCO. 2002. *Forum on the Impact of Open Courseware for Higher Education in Developing Countries: Final Report*. Retrieved 12 August 2009 from <http://www.wcet.info/resources/publications/unescofinalreport.pdf>.

<sup>13</sup> Ibid.

<sup>14</sup> The William and Flora Hewlett Foundation. 2008. Open Educational Resources (OER) – making high quality educational content and tools freely available on the web. Retrieved 13 November 2008 from <http://www.hewlett.org/Programs/Education/OER/>.

*quality benchmarks and potentially establish new models for organizing and delivering content.*<sup>15</sup>

It was not just course materials that were to be supported, but also modules, learning objects, library materials and journal-related data. Together these materials were described as “a new public library”.

### *An emerging landscape*

After a decade of development of Open Educational Resources, one can begin to discern a landscape of initiatives with differing objectives and approaches, but all having the aim of increasing access to knowledge. The initiatives outlined below are but indicative of this diversity. They represent a publishing solution, a new institutional model for sharing knowledge, a new approach to designing courses, a new generations of OER materials, and a plan to address national policy objectives.

### ***Rice University Connexions: Sharing knowledge and building communities***

The Connexions project began in 1999 to address some of the problems associated with publishing. The ultimate goal is to make high-quality, open source educational content available and free to anyone, anywhere, anytime.<sup>16</sup> Connexions provides the tools and the environment that allow authors, teachers and learners to create and access learning materials, textbooks or courses from an open-access repository.

After being closed for a decade, Rice University Press was re-opened as a digital press supported by Connexions. The press follows the traditional pattern, except that content may be viewed without cost online or a paper copy may be printed on demand. Publications will never go out of print.

### ***MIT OpenCourseWare: Open sharing, global benefits***

MIT considered a range of options for digital learning. Rather than creating online courses, the institution decided to share the materials used for classroom instruction. The decision taken was to make virtually all MIT course content openly available on the Web. In doing so it was hoped that the materials would provide:

- building blocks for educators around the world;
- additional resources for classroom students;
- support for independent learners.

This is a new model for universities in the digital age for disseminating knowledge and sharing scholarship.

Other institutions have adopted the model of free and open digital publication of high quality educational materials, organized as courses. More than 200 higher education institutions from 33 countries – from Afghanistan to Vietnam – have joined the OpenCourseWare Consortium

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<sup>15</sup> The William and Flora Hewlett Foundation. 2002. *Strategic Plan: Education Program, November 2002*. Retrieved 2 September 2009 from <http://opencourse.org/Collaboratories/occollab/files/strategicdirections>.

<sup>16</sup> Henry, G. 2004. *Connexions: An Alternative Approach to Publishing*. Retrieved 2 September 2009 from <http://cnx.org/aboutus/publications/Connexions-alt-pub-color.pdf/>.

(OCWC) with the mission “to advance education and empower people worldwide through opencourseware”.<sup>17</sup>

***Carnegie Mellon Open Learning Initiative: Open courses backed by learning research***

Carnegie Mellon University launched the Open Learning Initiative (OLI) with the objective of developing “exemplars of high quality, online courses that support individual learners in achieving the same goals as students enrolled in similar courses at Carnegie Mellon”.<sup>18</sup>

Using a concept similar to that of the course team that was originated by the UK Open University, OLI courses benefit from the close collaboration of cognitive scientists, experts in human-computer interaction and experienced faculty members. Courses have assessment embedded into the instructional activity, and the technology that delivers the instruction also collects data to give feedback to students, instructors, course designers and learning science researchers. This set of feedback loops characterizes the iterative model of OLI course development.

It is this model of OER that will be followed in the \$500 million online education plan proposed in July 2009 by US President Obama to develop open community college courses. The set of courses to be developed would be available to colleges nationwide and would drastically increase online educational opportunities.<sup>19</sup>

***Open University of the UK OpenLearn: Opening access to education***

OpenLearn was established to understand the implications of OER for the future of learning, and the interest generated in the project points to the “transformative nature of OER in the higher education community”.<sup>20</sup>

The web site was launched in 2006 with two sections. LearningSpace provides a selection of structured learning materials for learners to use alone or in a group, or in a discussion forum. LabSpace provides access to learning materials for editing, collaborative work and publishing of new versions for sharing with others.

OpenLearn represents a significant development in the OER movement, and contends that the sophistication of the materials has resulted in a new generation of OER. Lessons learned are being made available through research publications, in the spirit of sharing that underpins OER itself.

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<sup>17</sup> OpenCourseWare Consortium. 2009. About us. Retrieved 2 September 2009 from <http://www.ocwconsortium.org/about-us/about-us.html>.

<sup>18</sup> Thille, C. 2009. Building open learning as a community-based research activity. T. Iyoshi and M.S. Vijay Kumar (eds.), *Opening Up Education: The Collective Advancement of Education Through Open Technology, Open Content, and Open Knowledge*. Cambridge, Mass., The MIT Press, pp. 165-179.

<sup>19</sup> Parry, M. 2009. Obama’s great course giveaway. *The Chronicle of Higher Education*, 3 August 2009. Retrieved 18 August 2009 from <http://chronicle.com/article/Obamas-Great-Course-Giveaway/47530/>.

<sup>20</sup> The Open University. 2007. *OpenLearn. Creating a new world of learning*. Retrieved 18 August 2009 from <http://www.open.ac.uk/openlearn/assets/krntq9hqf7ivzb3kqw.pdf>.

### ***Open University of the Netherlands OpenER: We've got to be open***

The Open University of the Netherlands launched its OpenER project in 2006 to “bridge the gap between informal and formal learning and to establish a new style of entry portal to higher education with no barriers at all”.<sup>21</sup>

Learners have access to content at no cost – they study on their own schedule. The learner decides if and when to seek formal assessment and accreditation. This model provides truly open and flexible e-learning.

The government of the Netherlands set the goal of increasing participation in higher education from 30 to 50 per cent of the population by 2010. The OpenER experiment has had several important outcomes. Significantly, it has resulted in a growing awareness of the value of OER for Dutch education. In 2008, the Minister of Education launched a plan, Wikiwijs, to create a national infrastructure for the creation and use of OER by teachers at all levels of the education system.

In line with the comment of Sir Walter Perry that open and distance learning would have a positive impact on conventional institutions, these OER initiatives have a broad potential impact that will contribute to making knowledge more accessible and benefit education and learning. The Carnegie Mellon initiative stated explicitly its aim to create “exemplars” of high quality.

Re-visiting the constraint of the iron triangle of access, cost and quality, Sir John Daniel contends that Open Educational Resources allow the triangle to be stretched even without economies of scale. Open Educational Resources affirm the principle of education as a public good, and “herald the creation of a global intellectual commons”.<sup>22</sup>

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<sup>21</sup> Schuwer, R. and Mulder, F. 2009. OpenER, a Dutch initiative in open educational resources. *Open Learning: The Journal of Open and Distance Learning*, Vol. 24, No. 1, pp. 67-76. Retrieved 2 September 2009 from <http://www.informaworld.com/smpp/content~content=a909093008~db=all~order=page>.

<sup>22</sup> Daniel, J. 2009. Internationalization, regionalization and globalization: breaking out of the iron triangle. Speech to the UNESCO World Conference on Higher Education, UNESCO, Paris, France, 6 July 2009. Retrieved 10 August 2009 from <http://www.col.org/resources/speeches/2009presentation/Pages/2009-07-06.aspx>.

#### 4. UNESCO OER Community

*I am very pleased to see the whole world "around the table" ....  
We will be able to find a lot of experience and concerns.  
Great success!<sup>23</sup>*

With its convening power, UNESCO is uniquely placed to raise awareness of Open Educational Resources worldwide, and it had done this by supporting an international OER community of interest to explore OER initiatives and issues. Although intended as a worldwide movement, a large proportion of OER development has been in the North, particularly in the United States. For this reason, creating a space for developing and developed countries to come together around a virtual table has been an important step.

Almost 500 people applied to join a discussion of OER in 2005 and, as of mid 2009, the OER Community that was formed numbered more than 900 members from 109 countries, of which 64 are developing countries. While it is not really the whole world that is represented, more than half the Member States of UNESCO are. Community members represent a wide range of organizations, but over half come from universities and distance teaching institutions. About 40 per cent hold senior management positions. Teachers represent about 20 per cent, and researchers and project officers each represent more than 10 per cent.

This large international community has been sharing information about OER and discussing related issues for almost four years. What the OER Community has accomplished over the period is commendable. Its energy and engagement in deliberating, debating and collaborating remains informal but unflagging. The Community was even recognized by an award – the 2008 Leadership Award of the Merlot African Network.

The interaction has been organized as a series of structured seminar-like discussions on specific topics, with a background document to inform the discussion and a report to capture the main points as a record for others (all accessible on a website<sup>24</sup> or the OER wiki<sup>25</sup>). After an initial discussion that introduced the concept and presented examples of provision and use of OER, the Community moved on to discuss a number of specific issues that had been raised or identified as priorities in an informal poll. For example, because OER should be a balanced exchange worldwide, the community determined how to construct a “Do-It-Yourself/Do-It-Together” resource to build the capacity of those who wished to produce their own OER. This discussion resulted in the development of two resources, a toolkit and a handbook.

After the intense interaction of about a year and a half, the members of the community were invited to give their opinion on the five most important issues to advance the OER movement. And more than half of them did, setting out six clear priorities:

*To advance the OER movement*

- Awareness raising
- Communities and networking

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<sup>23</sup> Participant of the UNESCO International Institute for Educational Planning discussion forum, “Open Educational Resources: open content for higher education”, 24 October to 2 December 2005.

<sup>24</sup> [http://www.unesco.org/iiep/virtualuniversity/forumshome.php?queryforums\\_id=3](http://www.unesco.org/iiep/virtualuniversity/forumshome.php?queryforums_id=3)

<sup>25</sup> <http://oerwiki.iiep-unesco.org/>

*To enable creation and use*

- Developing capacity
- Quality assurance

*To remove barriers*

- Sustainability
- Copyright and licensing

It is clear that a movement that aims at worldwide impact, such as the OER movement, can be strengthened through international dialogue, networking and collaboration. Work is now underway to ensure the sustainability of the concerted action of the OER Community through the UNESCO Chairs Programme. A UNESCO Chair will provide ongoing support to this global community, and support the development of an international OER Network of institutions and organizations.

When more people, if not the whole world, sit around the virtual table, perhaps new dynamics fit for local needs will be more efficiently explored and more quickly implemented. It is fitting that a global community be convened to consider the emerging global commons and how to take advantage of it. And it is fitting that a global community consider the various challenges and constraints that are faced, to identify opportunities and to meet the various and diverse needs of the South and the North.

## 5. Building knowledge societies

*To remain human and liveable,  
knowledge societies will have to be societies of shared knowledge.*<sup>26</sup>

Now, I want to return to the title of this presentation, the challenges of making education available to all and building inclusive knowledge societies, and to the reflection at the beginning on the concept of the universal library.

Why did I use the concept of the library to discuss Open Educational Resources and the building of knowledge societies? It was not just because I love the grey stone buildings that were the seat of my earliest introduction to knowledge.

The OER movement can be seen as an elaboration of the concept of the universal library, the backbone of knowledge societies.

*But the Library of Alexandria was set up to do more than merely immortalize. It was to record everything that had been and could be recorded, and these records were to be digested into further records, an endless trail of readings and glosses that would engender in turn new glosses and new readings.*<sup>27</sup>

This surely describes the philosophy of Open Educational Resources – resources that are to be shared, built upon, re-shaped, re-purposed – and then returned to the commons to be available for the same exercise to take place over again.

But there is another issue inherent in the knowledge sharing that is the goal of the Open Educational Resources movement. Who shares with whom? At the moment, much of the development has been in the North, or the West, however one cares to characterize it. Is this yet another emanation of cultural hegemony? Perhaps not, if one takes the concept of the library. One picks and chooses, selects and rejects what is on the shelves, actual or virtual, in the case of the web and OER. What is most important is that the diversity of societies and cultures is represented on those shelves – that the nations and cultures of the whole world contribute their knowledge.

And yet another point should be stressed – knowledge societies must strive to be inclusive if they are to further the wellbeing of all their citizens. Let us remember the Constitution of UNESCO that proposed full and equal opportunities for education for all, the unrestricted pursuit of objective truth and the free exchange of ideas and knowledge. The frustration and fury of the excluded – in this case a woman denied access to a university library – is palpable in the quote below and stands for all those that seek access and are turned aside, as well as those that cannot seek because they cannot even mount the steps.

*Venerable and calm, with all its treasures safe locked within its breast, it [the library] sleeps complacently and will, so far as I am concerned, so sleep for ever. Never will I wake those echoes, never will I ask for that hospitality again, I vowed as I descended the steps in anger.*<sup>28</sup>

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<sup>26</sup> UNESCO. 2005. *Towards Knowledge Societies*. UNESCO World Report. Paris, UNESCO.

<sup>27</sup> Manguel, A. 2006. *The Library at Night*. Toronto, Alfred A. Knopf Canada, p. 28.

<sup>28</sup> Woolf, V. 1993 (first pub. 1929, 1938). *A Room of One's Own/Three Guineas*. Harmondsworth, Penguin Books. p. 7.

Education systems too must be inclusive, meeting the diverse needs of all learners, and particularly marginalized and excluded groups.

The Open Educational Resources movement, like the Internet, is just beginning its trajectory of innovation. The decisions taken now will affect its potential to address some of the important social and economic challenges of this new century.

## Conclusion

### *Access to knowledge – Open Educational Resources*

Over the course of my career, I have had the opportunity to work on many interesting issues in a number of institutions. I have had the pleasure of working with many outstanding colleagues.

But of all the issues, I have found Open Educational Resources to be the most stimulating and engaging. And of all the colleagues, the large international community of those engaged in increasing access to knowledge through Open Educational Resources has been the most inspiring.

It has been a privilege to take part.