

Open sourcing education:

Learning and wisdom from iSummit 2007

This report summarizes learning and wisdom from the education track at 2007 iSummit, held in Dubrovnik, Croatia. Organized annually by iCommons, the summit serves as a gathering of people from the global Creative Commons movement. This was the first year that there was a full track dedicated to open education.

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Introduction

"Education will drive the future of the Commons movement."

Participant, 2007 iSummit Education Track

The iSummit 2007 education track felt like an important moment in history. Here's the snapshot: **25 committed activists and innovators gathered in Dubrovnik to participate in a conversation about education and the commons**, with another 25 people flowing in and out from the main iCommons annual summit. These people spent three days in a beautiful – albeit boiling hot – building propped on the edge of the Adriatic Sea, dreaming up ways to collaboratively build an open education future.

The people who attended were from all corners of the world: Australia; Canada; Chile; Estonia; Finland; Netherlands; Peru; Poland; South Africa; the United States. Almost everyone who attended spends the bulk of their time running practical projects applying 'commons thinking' to education. Whether teachers or policy makers or students, they all had a concrete stake in opening up education.

Listening to the conversation, it was clear that we don't yet have a good 'map' of open education. The definitions and boundaries are not quite firm. However, there is growing energy, and pieces of the map are rapidly making themselves evident. **Free text books. Collaborative processes. Community management models. Educational content repositories. Authoring platforms. Licensing approaches. Policy visions.** All of these things are being articulated and experimented with in multiple places around the world, and all were discussed as a part of the education track at the 2007 iSummit.

Even without a perfect map, it is clear that **these ideas offer huge potential to transform and improve education.** At the simplest level, open sourcing education can provide top quality textbooks, courseware and learning aids to millions of people who have limited access to educational materials today. There is also tremendous potential for innovation in education, as well as improving the quality of materials we use for learning. Similar to open source software, educators who translate MIT Open Courseware into Chinese may improve these materials along the way, in turn sharing these improvements for others to use. And, ultimately, if learning materials of all sorts are open, there is an opportunity to put learners at the centres of this collaborative value creation: with students playfully adapting, remixing and resharing materials for others as a part of the learning process. There is a movement afoot here, and it is a movement with an aim no less than making learning accessible and adaptable for all.

The purpose of this paper is to document this moment in history, sharing the learning and wisdom that emerged from the grassroots open education leaders who gathered in Dubrovnik, and suggesting a few next steps to make this movement grow. In particular, we want to highlight how the conversation is moving from things like content and repositories to a broader view that includes all the people, processes and resources that make up the open education ecosystem. We also want to flag some of the major challenges discussed at the iSummit: focusing more on use, users and usability; making collaboration, licensing and packaging better; investing more energy and money in communities and processes which bring open educational content to life. And, looking forward, we want to ask a question: How can we best help the emerging open education movement spread into all levels of education and all corners of the planet? **What sparks can we create to help this movement truly catch fire?**

Where we stand

"Liberating content is important. That already is a revolution."

Participant, 2007 iSummit Education Track

The amazing energy and ideas witnessed during the open education discussions in Dubrovnik did not appear from thin air. Rather, they emerged from a 5+ year old conversation about open content and education, often referred to as the open educational resources movement. And, of course, they are also part of a much broader conversation about how the commons and peer production can open up access to information and knowledge in our society.

The initial sparks in the open education conversation probably seemed crazy when most people first saw them.

In January 2001, Wikipedia was launched as an online encyclopaedia that anyone could edit. Most people thought that it would never work. During its first month it collected 17 articles, by April it had 1,000, in October more than 10,000 and by the end of 2002 it crossed the 100,000 article mark.¹ It is now the largest encyclopaedia in the world and a tremendous resource for students and lecturers.

In 2002, the Massachusetts Institute of Technology (MIT) launched its OpenCourseWare project. It announced that it would publish all of its course materials online, open for others to use, modify and share free of charge. The world of higher education was in shock - how could MIT give away its "crown jewels" when the rest of the world was trying to commercialise teaching and learning activities? With a combined belief in open access to education and the power of collaboration to improve materials, and with financial support from the Hewlett Foundation, MIT began to release hundreds of courses to the public. The success has been resounding. As of today, MIT has published over 1700 courses online, which are being accessed by more than one million users every month.²

In the years since, dozens -- or, more likely, hundreds -- of initiatives have emerged to promote the cause of open education. At the Dubrovnik Summit alone, you had groups focused on: creating royalty free textbooks for primary and secondary schools (South Africa's FHSST and the Polish FreeTextBook); making content licensing easier for educators (CC Learn and Australia's Department of Education); packaging and indexing educational materials so they are easier to find and use (OER Commons, AcaWiki, OLPC); nurturing online communities for teachers and authors (WikiEducator and EducaLibre); and growing open education as a field and a movement (iCommons, OSI, Shuttleworth Foundation). And, these were just the people who were able to make it to Dubrovnik. Important global players like the Hewlett Foundation, UNESCO, Sun Microsystems or the OECD have also stepped into (and helped to create) the open education space.

Looking across all of this, it is clear that there has been significant progress in open education over the past five years. Wikipedia and MIT OpenCourseWare alone are revolutionary new tools for teachers and learners. They have been followed by a number of important platforms for producing and sharing open educational resources, including Connexions, Curriki, WikiEducator and OER Commons. These sites have mapped and

1 <http://stats.wikimedia.org/EN/TablesWikipediaEN.htm>

2 <http://ocw.mit.edu/OcwWeb/Global/AboutOCW/evaluation.htm>

helped to create a huge body of open educational content. OER Commons alone lists almost 15,000 lesson plans, workbooks and teaching guides. The 100 members of the Open Courseware Consortium have published more than 4000 courses.¹ The open education movement has focused on building repositories and gathering content, and at generating momentum and excitement. These are important steps in the direction of opening up education for all.

However, despite all of these achievements, there are still many subjects and languages for which no quality open content exists. And we have yet to see wide adoption of open educational content by schools and universities, major policy changes, or real innovation in how we deliver education.

Of course, changing the world takes time. But there are also major roadblocks facing the cause of open education, roadblocks that won't go away without focus and effort. With a few exceptions, the content produced is not used widely enough, and rarely do users make improvements that they then 'share back'. Materials are of varying quality, hard to find and poorly packaged. It is difficult to recruit and motivate new authors, especially in the k - 12 space. It's even more difficult to build a cadre of remixers, learning designers and evangelists. Many projects and platforms are siloed from each other, with people from different parts of the movement rarely working together in concrete ways. And, even if all this could be overcome, there would still be a need to move through the hoops of getting open materials accepted by policy makers and administrators, and defining how open education connects with national education systems. There have been successes, for certain, but **it feels very much like we are at the start of very promising road, but with some potholes, roadblocks and detours still ahead.**

Thinking like an ecosystem

"Content is a piece of the revolution, but not the whole piece."

Participant, 2007 iSummit Education Track

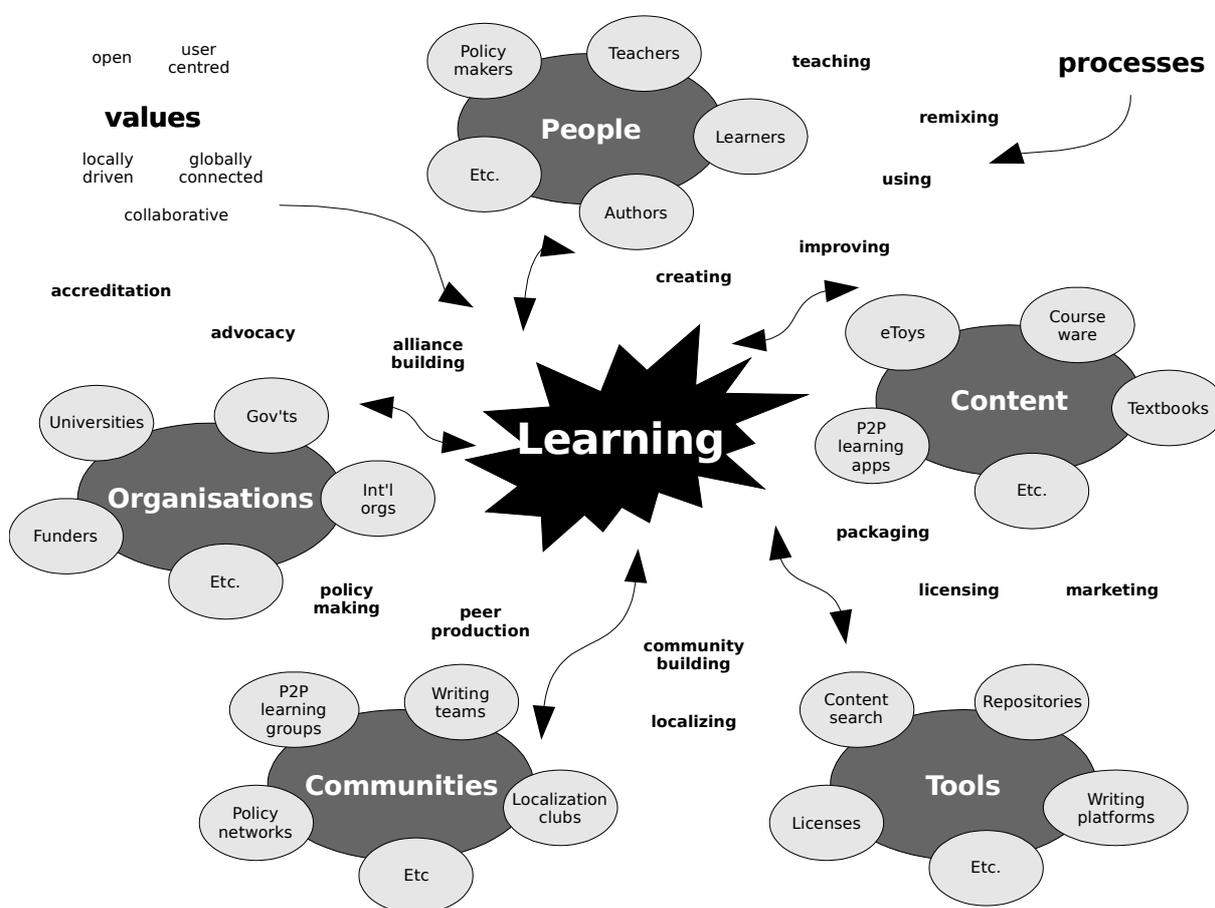
On the last day of the iSummit, the the people in the open education track produced a series of five drawings to show what the future of open education could look like. The message from these drawings was clear: **the first step to getting past the roadblocks is to broaden the conversation, and to put all the pieces of the puzzle together.** There was talk of moving beyond content to users and communities. Beyond higher education to all levels of education. Beyond America and Europe to all parts of the world. And, most importantly, beyond resources and repositories to how all of these elements together make up an open educational ecosystem.

In some ways, this broadening of the conversation has already started. The term Open Educational Resources, which many people in this space use to describe what they are working on, has grown over the years to encompass much more than just content. It was originally coined to describe "the open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes (UNESCO 2002)." It is now used to describe not only educational content, but also technological tools, and other resources, including licenses for publishing content and best practices (see for example [Wikipedia](#), or OECD 2007).

1 Unpublished statistic collected by the Open Courseware Consortium, June 2007

However, even as this definition broadens, the emphasis is still on content and tools, rather than use and learning. Processes, communities, institutions and, most importantly, people are all central to making open education a success. Yet they are so often missing in the picture. All of the different pieces of such an ecosystem had a place in the discussion in Dubrovnik, and there was a strong push to find a way to take them all in as we move forward as a movement

Researchers are starting to develop sketches of this broader open education ecosystem, but they have little data to go on and the picture remains fuzzy.¹ However, if you looked closely at the five drawings from the last day of the Dubrovnik summit, you saw that there was something like an ecosystem map emerging naturally from the conversations. Using these drawings as inspiration, we imagine that this map might look something like this:



This map is by no means a definitive picture of the open education ecosystem. However, it may be a useful tool if we better understand who are the people and projects that are already out there, and to identify the strengths and weaknesses in the ecosystem. A map also makes it easier for us to locate areas of progress and best practices, especially if we plot actual projects and organisations onto the landscape.

1 For a starting point, please refer to Downes (2006), Keats and Schmidt (2007), or this presentation by Baraniuk (2007) at <http://www.youtube.com/watch?v=RRymilFHpE>

If we are to use the map in this way, we first need to understand its components:

People: Who makes up the open education space? Students, authors, teachers, professors and self-learners are part of the picture. Policy-makers and administrators are also critical. People often play multiple roles (e.g. learner and teacher).

Content: This includes traditional materials such as textbooks and teaching notes, as well as online courseware, educational software, games and toys, learning designs and learner created content. Traditionally, most of the energy and money in open education have gone into producing content, and most of it in developed countries.

Tools: Tools are all the things that people use to engage in open education. That includes: computer software to create, share, and use content; repositories that make it easier to find and discuss content; standards that enable exchange of content between different software platforms; and legal licenses that clarify author and user rights.

Communities: There are two important types of open education community -- peer production communities that create or steward content and communities of practice that share information and knowledge between members that work in similar areas. With a few exceptions, there has been little conscious investment of effort in community building in either of these two areas.

Organisations: The traditional education terrain is marked by schools and universities, who accredit our achievements with degrees. And governments determine what we should learn. Clearly these institutions play a crucial role in the open education environment, both as experts on 'how to get it right' and as policy makers who are needed to help open education scale. However, there is also a need for smaller, more nimble organisations, including NGOs, small businesses and informal learning groups, who can advocate and innovate more effectively than larger institutions.

Processes: Processes describe what people do in the ecosystem; they are the dynamic connectors between different people, platforms, resources and organisations. It's the process of acting and engaging across the ecosystem that creates energy, innovation and momentum. It's what brings the ecosystem to life. Like community, too little investment and attention has been focused on the processes of open education.

Values: At the deepest level, a loosely agreed set of common values are what hold the open education ecosystem together. They create a common ground on which a teacher from South America and a policy-maker from Australia can find themselves part of the same movement. While there was no attempt to nail down and agree on a particular set of values in Dubrovnik, some of the terms participants used to describe their work were 'open', 'collaborative', 'locally driven and globally connected', and 'user centred'.

If the open education movement is to start 'thinking like an ecosystem', we need to do more than just look at how much content we are producing, or even how many institutions have bought in. **We need to start looking at the overall system.** Coming to a rough agreement on a map helps with this. It helps us to see what all the pieces are *and* how they connect. It gives us a radar to quickly identify and adopt ideas that are working. It also makes it possible to sketch out where there are strengths and weaknesses, and what's missing altogether. Which, as it turns out, is exactly what started to happen in a small way on the last day of the iSummit in Dubrovnik.

What's missing?

"Wikipedia is 10% technology, and 90% community."

Jimmy Wales, Wikipedia founder

After three days talking with fellow activists and innovators, four people from the open education track agreed to share the group's learning with the rest of the iSummit. They celebrated the fact that we are already doing a great deal when it comes to open education projects, content and platforms. However, they also stressed that we are not doing enough to connect with the people and communities that will bring the open education movement to life. They urged iSummit participants interested in education -- and the whole movement for that matter -- to **engage, unify, focus and act**. The questions they started answering are: Engage and unify who? Focus on what? Act how?

It was clear from discussions in Dubrovnik that things like content and tools have already received a great deal of attention, especially in the field of higher education. Despite all this, we need to **identify and focus on those areas that still lack high-quality content**. Besides, much of the content that does exist is poorly used or difficult to sustain. A likely reason: a lack of focus on users and community building. There have been few deliberate efforts at grassroots engagement and community building that focus on the people who actually use educational resources.

There is a particularly critical need to **reach out to students, teachers and independent self-learners**, giving them opportunities to become remixers and authors, or just to get excited about open education. Eve Grey wrote on her blog following the summit: "Open education is where ideas are fed upwards and downwards, from teacher to learner and learner to teacher, so that you get a productive circle of free exchanges." Putting learners and teachers at the centre of the open education movement is likely to make content projects much more sustainable. Very little has been done to invite everyday teachers and learners into the movement.

Similarly, there is a need to **take the process of building and nurturing peer production communities more seriously**. Creating, testing, accrediting and sustaining high quality open educational resources does not happen automatically. Practically, this means a change in thinking from 'applying open licenses to existing books' to 'helping people build a community, write together and produce quality content products'. The tangible outcome -- a free educational resource -- is the same in the short run. However, the investment in skills and community building has the potential for a much more sustainable result in the long run. We need to consciously engage in this kind of hands on community building -- and to document what works and what doesn't -- if we want to create sustainable open educational content projects. We also need to recognize that it often takes financial resources to establish, support, and sustain these communities of creators.

People attending the iSummit were also thirsting for stronger communities of practice in open education. Many simple and useful ideas for building these communities were put forward -- open education meet ups, local unconferences¹, writing and remixing sprints,

1 An unconference is a participatory, self organized learning event, as described at <http://en.wikipedia.org/wiki/Unconference>. The iSummit open education track was facilitated by Aspiration's Allen Gunn using many unconference techniques.

and events like the iSummit open education track. There was also discussion of virtual engagement, organising online events, and encouraging learners to set up peer-to-peer courses around existing open educational content. Few of these ideas are novel, and none of this is brain surgery. However, **we need serious intent, focus and investment to build vibrant communities of practice**. Up to now, these things seem to be sorely missing from the world of open education.

As we look for new ways to engage and build community, we need to **think of this as a truly global movement**, with diverse contexts and politics, but with a shared set of values and strategies. For better or for worse, the best known open education projects come from the United States, and mostly from big universities. Very few developing-country institutions have been active contributors of open educational resources so far. This gap tends to get waved aside with the assumption that knowledge flows from developed to developing countries, with little attention paid to the contributions that institutions in the South can make to a universal knowledge commons. The good news is that there is a more and more emergent work coming from these institutions and from smaller players all around the world, many of whom were at the iSummit. However, efforts are needed to bring these people onto the movement radar, and to help them engage. This could happen in part by building on existing networks of local organisations promoting the commons all around the world.

Beyond engagement and community building, there are also legal roadblocks to growing the idea of open education. A great deal of discussion at the iSummit was focused on the challenges of making content licensing easier for educators. At the moment, there are major questions about licenses for educational content: incompatibility (how do you combine materials with commercial and non-commercial open licenses?); tracking (are schools paying for materials that are actually free in the commons?); and ease of use (how does an educator pick the right license)? One thing is clear: we need to **make licensing issues easier for educators**. The good news is that a number of groups -- from the new CC Learn initiative at Creative Commons to the Australian Department of Education -- are starting to do just this.

Another roadblock is the simple issue of packaging. Large-scale adoption of open education will only come when a critical mass of resources are well packaged and easy to use. Unfortunately, the growing cornucopia of free educational content is rarely in a form that teachers and learners can just pick up and use. End users not only need to find useful content, they also need to compare it with similar content to see what's best, adapt it so it makes sense for their circumstances and ensure that it fits with their curriculum or learning goals. Finding content is becoming easier with new portal and search projects. But there is a need to **go much farther in packaging content so that teachers and learners can just pick up materials and use them**.

Finally, we need to remember that many important issues in education play out at the policy level. Two examples are quality assurance and accreditation, both cornerstones of formal education. We will need creative thinking and innovation in these areas if we are to tap the full potential of open education in a formal setting. As the Dubrovnik conversations clearly highlighted, even the most successful open education initiatives are making limited headway with policy makers on issues like these. Changing this situation will require open education advocates to **reach out to policy makers and others responsible for education funding, administration and policy**. Only once individual policy makers understand and get excited about open education will their institutions follow.

Working like a movement

"Scalability only happens if this is a global movement."

Participant, 2007 iSummit Education Track

People at the Dubrovnik open education track were engaged, focused and primed for action. The final presentation to the whole summit included a 20 foot long paper timeline showing things that people were planning to create or do over the coming year: events, projects, web sites. People had concrete plans and ideas, and many were already in motion. The problem was that there was not much more connecting all these efforts other than a hastily pulled together collection of flip chart pages, a list of email addresses, and the introductions that were made during the summit.

One of the biggest pushes from the iSummit open education track was for unity and collaboration. In some ways, things are already moving this way. People in Dubrovnik -- and at other OER and OCW events -- speak freely about 'the movement'. Yet, despite a common instinct, there is still a great deal of fuzziness about what this movement includes. More importantly, actual projects and initiatives are rarely linked to each other in a constructive or complimentary way. Collaboration is at the centre of these projects but, for the most part, it is collaboration within silos. **The Dubrovnik group made a clear plea for all of us to move outside these silos, and to start thinking, working and talking like a movement.**

As with engaging people and building communities, investing in this movement is not such a complicated activity. Partly, it's about an attitude shift: seeing every other person and project in open education as a potential collaborator, or at least as part of a common network of inspiration and wisdom.

Building a movement is also about getting together more often. There was discussion in Dubrovnik of regular open education meet ups around the world. There was also scheming about how this emergent community can work together to ensure there is a vibrant open education track again at iSummit 2008. People know that gathering -- both face to face and virtually -- is essential for creating a greater sense of unity. It's also the spark that leads to practical collaboration and projects, which in turn build even more bridges and deepen the movement further.

And, of course, there is a need for common sense of vision that a movement can rally around. The Budapest Open Access Initiative, with its simple two page declaration of common principles and strategies, was cited as example of how such common visions can be useful. A number of people suggested that we need a similar declaration for the open education movement. Plans are underway to work on a document like this in Cape Town in September 2007.

As we get back to our open education projects and reflect on common definitions over the coming years, there is one image from the closing day of the iSummit that is worth keeping in mind. It is the image of open education as a flock of migratory geese, moving back and forth between North and South. The flock combines birds from all places. Each goose takes a turn leading the flock, taking the strain, and then handing over to their peers. The flock is not confined to just the North, or the South. It flourishes as a global movement. Hopefully, we are on the way growing a stronger, and more connected, flock.

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