

# SCORE Project

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## Case Study of iTunes U Deployment: University of Oxford

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## Introduction

The Open Educational Resources movement is often traced to 2001 when Massachusetts Institute of Technology announced it would begin publishing its entire course catalog free on the internet.(Perkins, 2010) UNESCO announced its support for open educational resources in 2002 in its study into the impact of open courseware on higher education in the developing world(UNESCO, 2011). Finally the CapeTown Declararion in 2007 encouraged all governments to subsidise the creation and publication of open educational resources (Cape Town Meeting Participants, 2007). Also in 2007, iTunes U was launched by Apple Inc. as a channel for universities to publish free multimedia learning materials, quite separate from the OER movement. And yet it quickly was seen to be a possible channel of real OER. While many OER projects were launched through infusions of special project money such as from the Hewlett Foundation (which supported UNESCO and the Open University's OpenLearn), iTunes U sprang up as cooperation between Apple and several universities.(Acosta, 2008) This report examines the iTunes U implementation of the University of Oxford and will be of interest to educators, managers, and technologists considering launching an iTunes U site or who wishes to know more about open educational resource issues.

This report is an output of a SCORE project with Shared Solutions of the UK Open University, entitled SPIDER: Sharing Practice with iTunes U Digital Educational Resources, from November 2010 through October 2011. Information presented is from a number of sources, including an online survey advertised worldwide through social media, capture and analysis of Twitter tweets containing the keyword itunesu, articles, reports, books, and interviews.

## University of Oxford: Background and Open Educational Interests

The University of Oxford is the oldest university in the English-speaking world, dating back at least to 1096. In 1190 the first known overseas student arrived to study in Oxford, beginning a strong tradition of international interchange. In the 1300s John Wyclif campaigned for free distribution of English-language Bibles, thrusting Oxford to the fore of the movement for ordinary people to freely access both scriptures and literacy. (University of Oxford, 2009) It can be argued therefore that Oxford grew up with both a social mission and experience of open-access issues. Although many aspects of Oxford make it a 'closed system,' -- high standards for entry and a campus not conducive to casual visiting -- there is an understanding amongst Oxford academics that their work needs to be accessible to the public. (Highton, 2011a) Indeed, one of its long-term aims is stated: "To be more widely accessible, both by broadening recruitment to its degree courses, and by expansion of opportunities for life-long learning including high-quality post-experience vocational courses and other part-time courses leading to awards, and by preserving the important provision of non-award-bearing courses." ("University of Oxford Mission Statement," 1998)

In 2005, Oxford began a project looking at the extent to which academics would be willing to publish their materials openly. It was found that academics were willing to publish openly, if they were protected from litigation, protected from criticism, given an incentive to so publish, and could be sure it would further their academic progress. At that time, it was found that some academics were publishing openly and making materials including podcasts available on websites. As yet, however, there was no institutional approach.

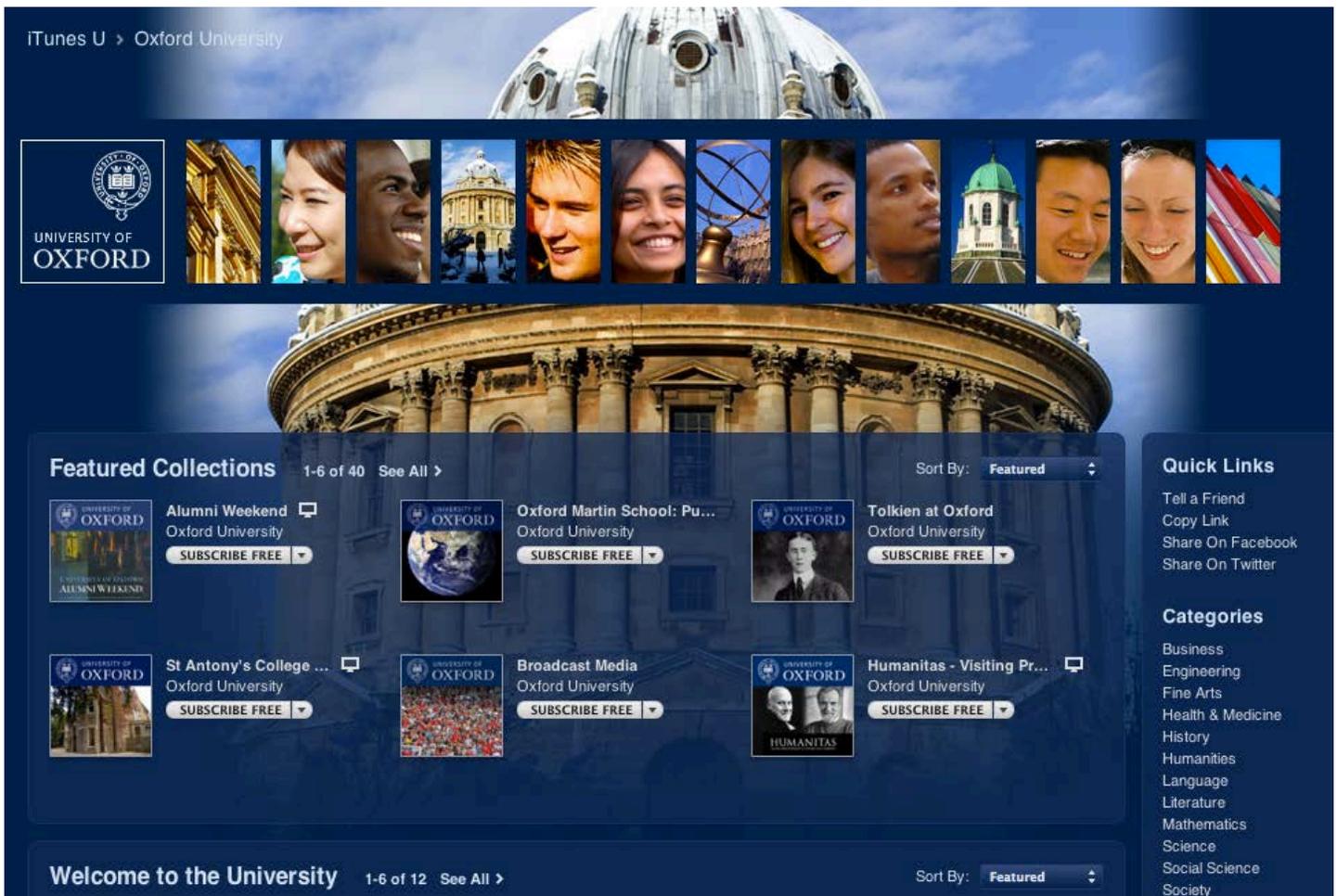


Figure 1. University of Oxford iTunes U home page

In 2008, Oxford became a founding member of the Steeple Project, along with University of Cambridge and the Open University. (University of Oxford, 2011a) The purpose of the Steeple project was to take a serious look at institutional educational podcasting, begin to implement it, and document best practice. At Oxford, it was during Steeple that the following

idea was established: how can we take recorded content from every corner of the university, and through RSS feeds bring them together in one place on the web? This led to the next question: why shouldn't at least some of these podcasts be made openly available?(Highton & Robinson, 2011)

It was also in 2008 that Apple approached Oxford with an invitation to join iTunes U. After a report by the Oxford University Computing Service (OUCS) to the highest level of university governance, the agreement with Apple was signed. Some months after its iTunes U launch, Oxford was included in the JISC Open educational resources (OER) programme - phase 1 funding(davidkernohan, 2009), for its project Open Spires("Open Spires: Inspirational Open Content, OER from Oxford University," 2009). Oxford's project was to create and make available OER stemming from their institutional research. The thrust of the project was that lecture content flows from academic research, and therefore capturing and freely distributing lectures as podcasts would produce research-led OER. These were made available on iTunes U as well as by means of RSS feeds on Oxford's website. Importance was also placed on the idea that these podcasts were freely captured as part of the naturally occurring academic life of Oxford, and thus had a good chance of being sustainable.

It is worth noting the place played by lectures in the academic life of Oxford. While in many universities, lectures are the most significant dissemination method of content organised by module, and are seen to be more or less mandatory, in Oxford the purpose of the lecture is to send students from the lecture to the library. Lectures are not seen as the main source of content of a class, and there is no implied attendance requirement. Furthermore, there is no comprehensive listing of lectures, so they may be hard to find and students may have schedule clashes of lectures important to them. Also, any student is encouraged to attend any lecture at Oxford. It can be seen how recording these events and making them publicly available on website and iTunes U serves a very useful purpose for Oxford students, giving them freedom to listen to any lecture, anytime, anywhere.

## iTunes U Preparation and Systems

Motivating academic staff to participate in the creation of podcasts was begun by OUCS with known contacts around the university and early adopters. OUCS was a 'trusted brand' as was the department of public affairs, which was the other cross-campus advocate of iTunes U. There were internal workshops, visits, and discussions by which the various departments and key academics talked through how participating in podcasts for iTunes U would help accomplish things the academics wished to do anyway -- raise their profile, disseminate their research findings, and attract the best students and staff to Oxford. Recorded-lecture podcasts seemed to be a 'good fit,' a technological endeavour which was win-win for academics, marketing, and the other partner Apple. These features of 'good fit' and 'win-win' were seen as contributing to the sustainability of the programme making it more likely to continue after the initial project setup period. (UniversityofOxford, 2011a)

Much care was given to legal issues. University lawyers took the approach that the university must be protected from all risk, so discussion focused on balancing risk aversion with innovation, student experience, and other potential benefits to university and staff. The university wanted to launch iTunes U and wanted academics to participate, but was not prepared to create a complete legal fail-safe in case, for example, something a lecturer said in a recording were taken out of context and the lecturer were sued. The Creative Commons license provided an excellent solution to these competing interests. At Oxford, content of lectures is owned by the lecturer, not by the university. In discussing use of a Creative Commons license, academics could see their lecturing as a creative activity and could consider the licensing of their performance. Through promotion and explanation of Creative Commons, academics felt both protected and encouraged to publish openly.

At the time that Oxford agreed to launch iTunes U, Oxford did not have a large central repository of audio or audio-visual materials. However, especially with the work of Steeple, individual departments and colleges had such collections. OUCS began to put systems in place by which RSS feeds of podcasts from the various departments could flow together through OUCS and out to iTunes U. At the same time, one condition of Oxford's senior management's agreement to iTunes U was that the central OUCS would take responsibility to obtain signed agreements from participating academics. The OUCS team would receive support from the other departments to do this, but the main responsibility would be OUCS's. This added an unavoidable administrative step. (Geng, Marshall, & Wilson, 2011)

It was furthermore decided that material released through iTunes U would not be exclusively available in that channel. It was felt that because iTunes does not run on Linux computers, and because there are people reluctant to use either Windows or Mac OS and also reluctant to use iTunes itself, the best strategy would be to make iTunes materials also available via RSS feeds on the Oxford website. It has been found subsequently that downloads from Oxford's iTunes U outnumber those from the RSS feeds on the Oxford websites by a factor of 10 to 1.

At the time of the run-up to iTunes U launch, the flow of podcasts was as pictured in Figure 2. The work of technical support staff from the different various departments at Oxford was vital to the launch, as these support staff might do the recording and input the all-important metadata, then finally submit to the queue (the Oxltems system) for the OUCS team to establish

agreements and release into iTunes U. This system was effective but there were occasional delays and miscommunications arising from such a devolved model. Regardless, it was seen as the most effective model.

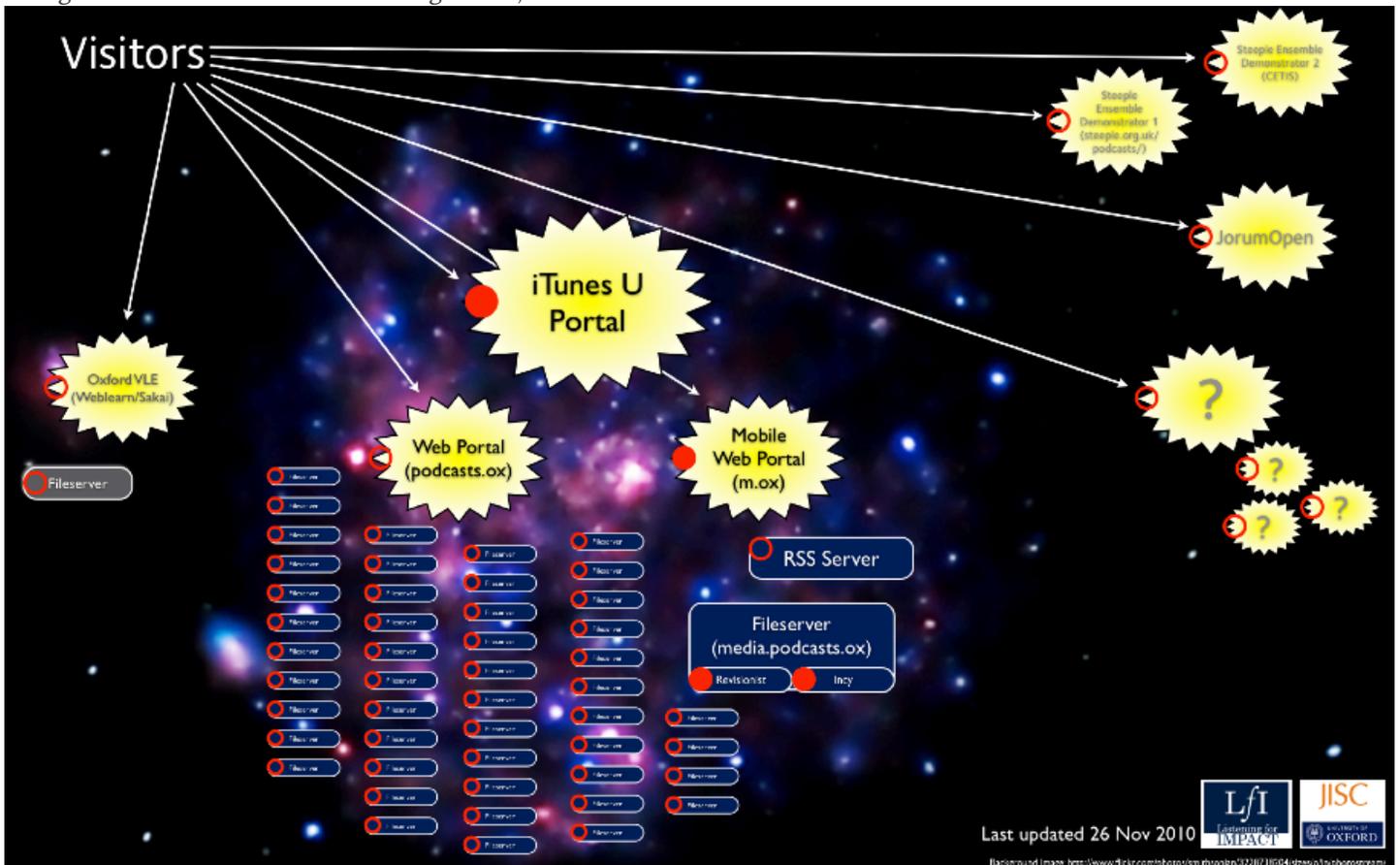


Figure 2. An overview of the multitude of file hosting and presentation portals for podcasting at Oxford. (Geng et al., 2011)

There were no new staff hired to prepare for or accomplish the iTunes U launch. There were two main technical people from OUCS whose roles were re-prioritised to do the launch. Three students also helped with the launch preparation including recording of podcasts.

## Launch

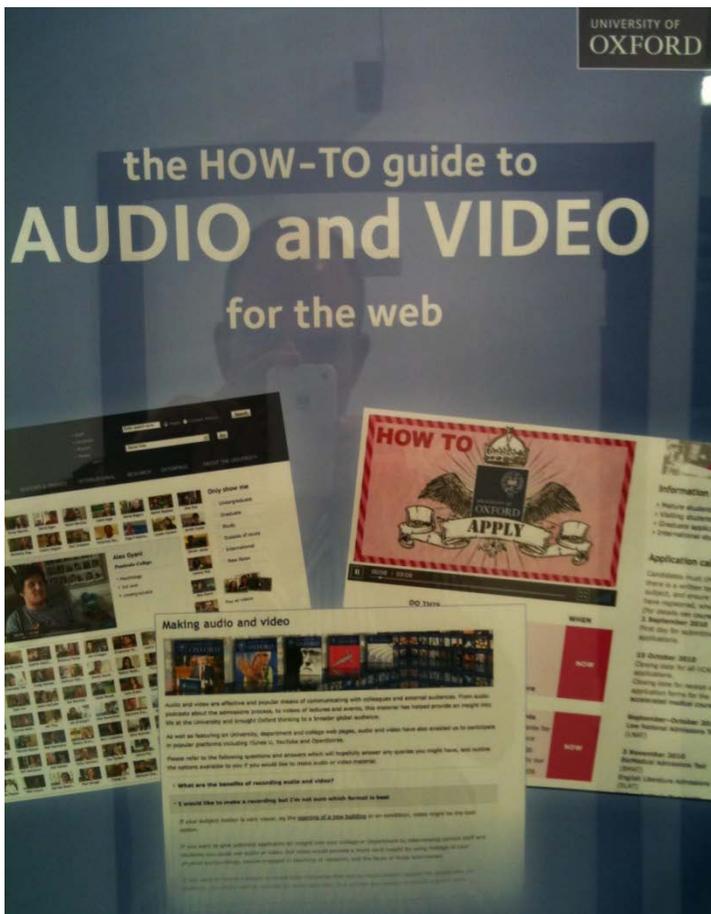
The University of Oxford launched its iTunes U channel on 7 October 2008. In the first week there were 168,000 visitors to the site and 60,000 downloads. University of Cambridge also launched its iTunes U channel on that day, and these two comprised only the 4th and 5th iTunes U sites in Europe. Good publicity arranged by Oxford and Apple encouraged visits and downloads. Oxford began a system of adding new content to its iTunes U channel every week. By August 2009 there had been over one million downloads from the site. (University of Oxford, 2011b)

The majority of Oxford's files at launch, and until the present, have been audio-only. These are comprised of recorded lectures, interviews, discussions, seminars, and workshops. There are audio-visual files and some e-books; Oxford was one of the first universities in the world to begin offering e-books in its iTunes U channel, and the first to offer Creative Commons-licensed e-books.

Oxford's audio-only lectures proved to be extremely popular. Where lectures were both audio-only and video recorded and released to iTunes U, the audio-only files were downloaded three times as often as the video. (Highton, 2011b) Audio-only recordings were also easier to address copyright for. Because the lecturer is speaking about his/her own work, and the date and time of the event are clearly known, ownership of the content is indisputable. Also, because there are no visuals involved, there are no issues with possibly copyrighted images of any kind. Finally, a minute's worth of recorded sound creates a smaller file than a minute's worth of recorded video; audio files are smaller, making storage and archiving easier and making download times from iTunes U faster.

Oxford began to notice that customers searched in iTunes U for certain lecturers' names. If a lecturer's name was well known, or became well known, any content from that person would be in demand. Of course, the Oxford name itself proved to be a draw for its iTunes U materials.

## Handling Success



As the months after the launch passed, more and more lecturers became interested in creating and releasing their work into iTunes U. While in some universities there might be substantial resistance to the idea of giving one's work away openly, at Oxford this was not the case. It would be fair to say that Oxford lecturers tend to have confidence in their work and lecturing. Sharing it openly with the public was something they wanted to do anyway. Another reason for the interest in sharing one's lectures is to be able to reach a larger audience. Lectures at Oxford are often to quite small groups. One lecturer stated "I work hard on my lectures, and it's nice that iTunes U allows me to reach more people with them." (Highton, 2011b)

The technical challenge of this success was how to ensure sustainability. OUCS believed the devolved model already in place was the most efficient technical delivery method as long as individual departmental support staff and academics could be upskilled enough to record their own events, 'top and tail' the recordings (add branding before and after the content), and upload them to the queue so that OUCS staff could release into iTunes U and the other channels. To this end, workshops were designed, promoted, and carried out with staff. Also, relatively inexpensive mobile podcasting kits were purchased and deployed. A favourite model of digital recorder is the Marantz PMD620 for £260, and a bluetooth microphone. By June 2011, hundreds of academics had been trained to do their own recordings and add them into the queue for iTunes U and other channels. (Highton, 2011b)

Figure 4. How-To Guide for iTunes U at Oxford

The license most often chosen was the Creative Commons BY-NC-SA - the artist must be attributed, the asset must not be used for commercial purposes, and must be shared alike. Gradually, however, academics began to favour dropping the non-commercial aspect of the license, as doing so allows the academic to use the work in books and television programmes; it actually makes the asset more open.

When discussing with academics the question of releasing their work as open content, OUCS staff usually do not use terms such as OER. Rather, they refer to the academic's creative process of creating learning material, and the Creative Commons license option. As of October 2011, about half of all of the assets being released into iTunes U by Oxford have a Creative Commons license. (Highton, 2011a)

Oxford's materials are unusual on iTunes U in that they show a Creative Commons badge and feature a Collection of material all with a Creative Commons license. This is a clever way of highlighting the license, since iTunes U does not include a search field having to do with license. I am aware of six universities whose iTunes U offerings are CC-licensed: Oxford, Yale, Stanford, Glamorgan, MIT, and UC Irvine (of course it is possible there are more than this). These six do not all clearly display the CC license.

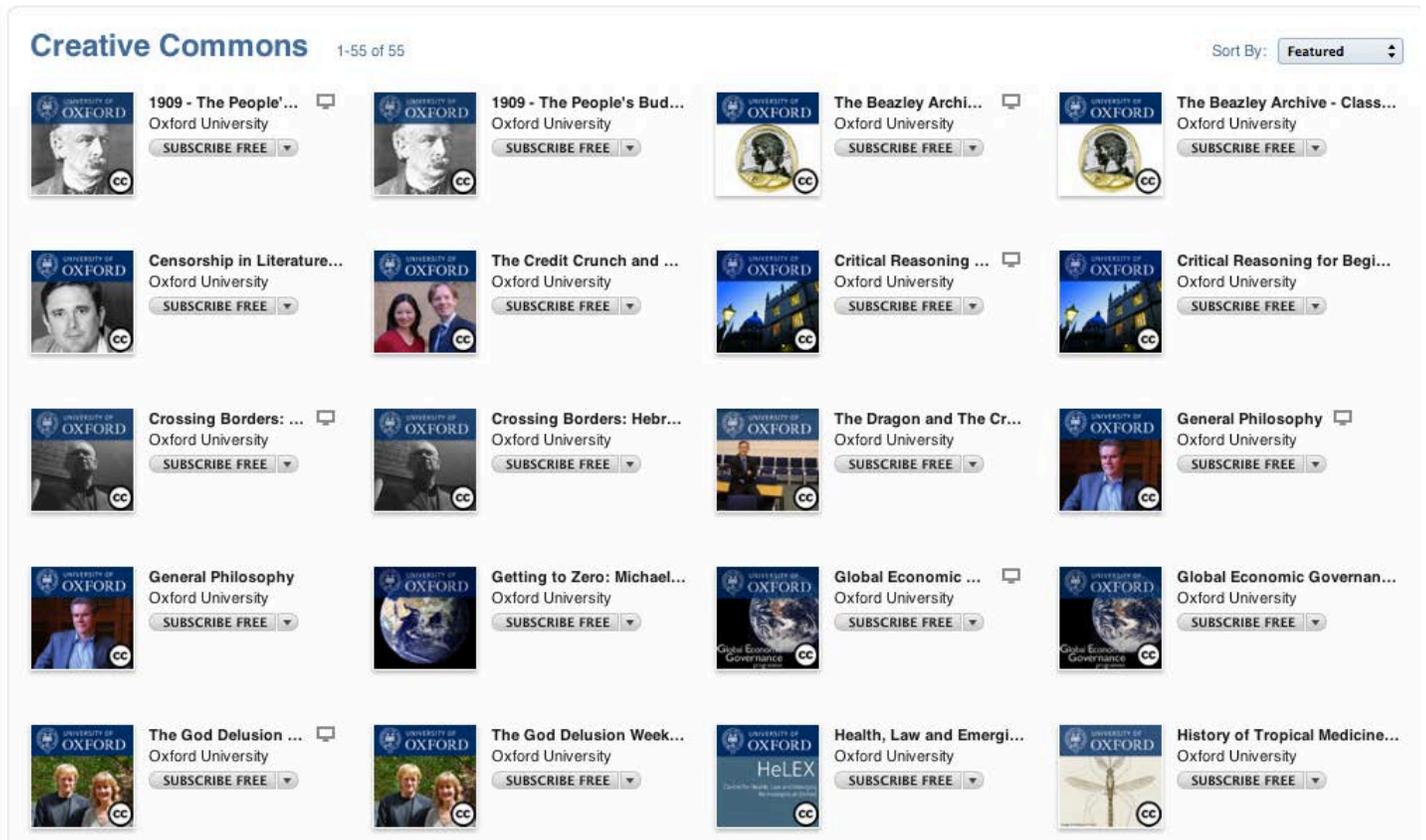


Figure 5. The Creative Commons Collection within Oxford's iTunes U channel

## iTunes U Metrics

As of 13 October 2011, the University of Oxford states that there have been more than 10 million downloads from their iTunes U site. Using figures from Apple, Oxford reports:

- Around 1800 items are being downloaded for a total of 130,000 times a week
- Oxford is reaching a worldwide audience of 185 countries (including 29% from China, 38% from the USA, and 18% from the UK)
- Mobile users account for 15% of Oxford's downloads, with most of these coming from Apple iOS devices (iPad 8%, iPhone 5% - of all downloads) (UniversityofOxford, 2011b)

It is significant that almost one-third of all Oxford's iTunes U downloads occur in China. When comparing iTunes U with YouTube, it must be noted that YouTube is blocked in China.

Download numbers are different from visits to the site. Each visitor to the iTunes U site is likely to download several, possibly many, files. Therefore download numbers will always be substantially higher. Figure 6 shows the pattern of unique ip address visits, from iTunes U launch until February 2011.

## Apple Marketing

Oxford has benefited from Apple marketing (probably more than most institutions in iTunes U, it should be noted). Oxford Physics lecturer Professor James Binney was featured on Apple's iPad commercial, as representative of academic content. As a result, Professor Binney, Oxford, and the Creative Commons license badge were repeatedly seen on television all over the world. In another example, Marianne Talbot's philosophy lectures were chosen as the example used in every Apple store when there is a demonstration of how to download a podcast from iTunes onto one's Apple device. Talbot's lectures rose to the top of the download charts.

## Unique IP addresses accessing podcasts over time

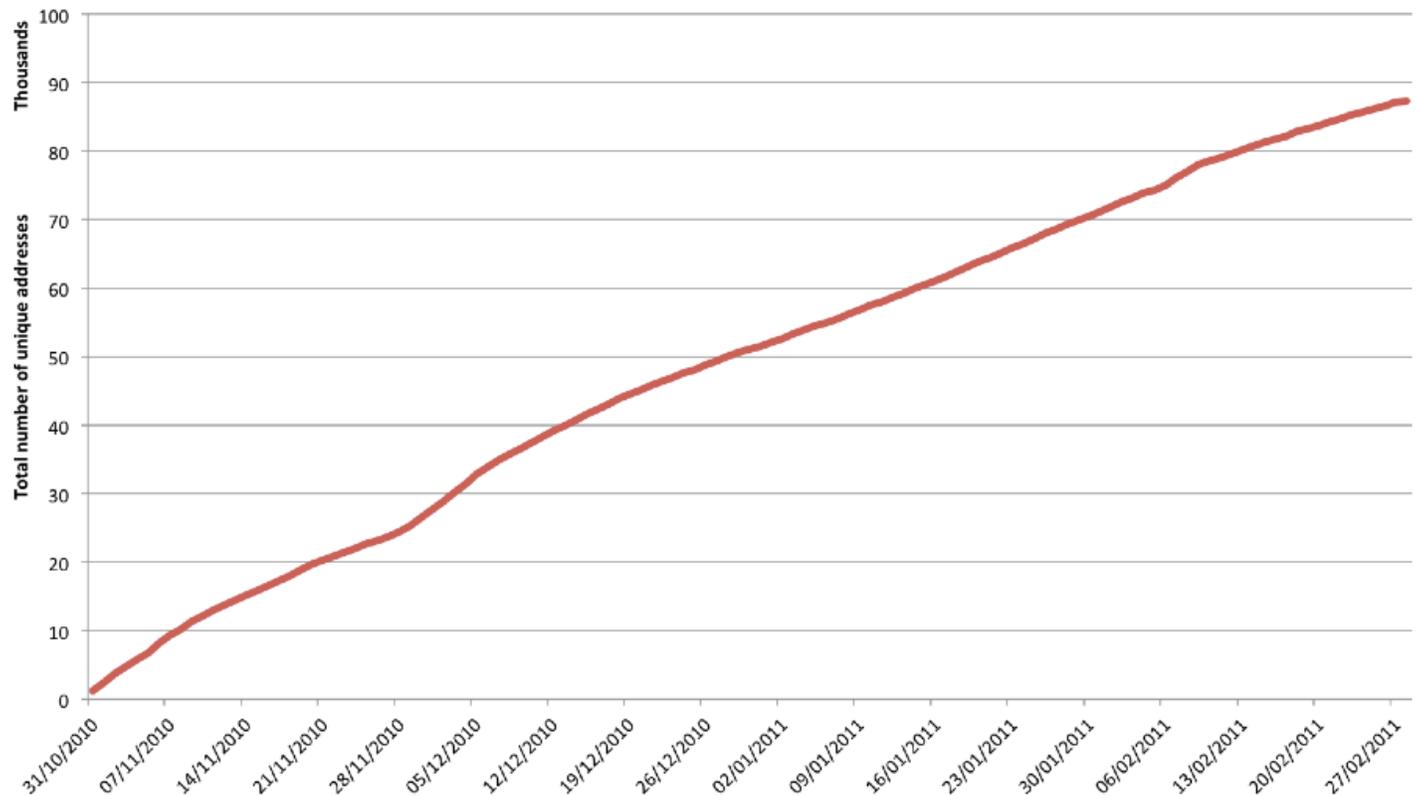


Figure 6. Unique IP address visits accessing podcasts over time (Geng et al., 2011)

## Impact and Reuse

As time went on, individual Oxford lecturers whose material was on iTunes U began to receive numerous emails from users who enjoyed their work. Once the OUCS realised this was happening, they could begin to collect evidence of the impact of these iTunes U resources. Some of the main categories of comments from listeners include:

- **Aspirational** - listening to these podcasts enriches and encourages students to consider Oxford for themselves. "As head of More Able and Talented in a large state school, ...our more able students are being encouraged to listen to the podcasts both to improve their understanding of the plays and to encourage them to believe that Oxford is not a rarefied and unattainable target, but operates at a level they will find accessible."
- **Inspirational** - listening to the podcasts inspires the listener to learn more. "I have downloaded and and listening to your series of lectures on philosophy. ...Can I just say how utterly engrossing they are -- and how completely stimulating. I completed my undergraduate studies a great number of years ago, but listening to your lecture makes me yearn for study."
- **Helping teachers in their professional development** - helping teachers to grow in their own profession. "Thank you for offering online your lectures on introductory quantum mechanics.... I teach high school science and maths, and I hope I can pass along to my students (at least some of) these ideas with the same excitement and clarity."
- **Reuse in the classroom** - Either by playing or otherwise using iTunes U materials as-is in the classroom, or by learning and then incorporating into teaching some of the ideas and examples taught in the recorded lecture, teachers are reusing Oxford iTunes U material in the classroom. "Members of the English department are now using Wittgenstein's Dabbit illustration in the way you did..." (Geng et al., 2011)

Often in OER discussion, it is assumed that the best kind of use of OER is when the material is changed in some way and then used. There has not been found much evidence of this kind of reuse of Oxford iTunes U assets. It is technically a little more difficult to change multimedia assets than it is to change text-based, although the difficulties are far from insurmountable. However, it can be questioned whether it is necessarily better that the OER be changed before reuse. Perhaps it shows that the OER is of really excellent quality, if it can be used as-is and does not need to be changed. (Highton, 2011b) Furthermore, the JISC OER Impact study of 2011 found that 'beyond-text' (i.e. multimedia) OER are very much valued because multimedia is

good for learning yet it is harder to produce than is text. Therefore, beyond-text OER are valuable to use as-is. (Masterman, Wild, & White, 2011)

## Conclusions

The University of Oxford's very successful iTunes U implementation can be credited to careful consideration of what kind of open resources constitute a 'good fit' for that institution's academics and the academic life of Oxford, as well as good choice of efficient technical implementation suitable for the university. Time and resources spent deciding on the best licensing approach resulted in a motivating and innovative use of Creative Commons. These factors came together to produce a 'tipping point' of still-increasing numbers of open content files produced by still-increasing numbers of Oxford academics. In addition to very high download numbers, partially attributable to Apple's own marketing work, Oxford has compiled compelling and even inspiring evidence of reuse of its iTunes U content.

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