**ABSTRACT.** The traditional intellectual property rights try to protect authors in the commercial field (edition, distribution, public communication, translation, etc.). But we are living now in a very different world where a lot of authors don’t want to protect all their rights, but to share their works. And that is the case of university professors. The main part of their educational materials are not used in a commercial way, so why don’t share them with an open license? This is the way University of Cantabria (UC) has followed with some different programmes: OpenCourseWare, Massive Open Online Courses and Open Repository (UCrea). And it works.

The OpenCourseWare site (OCW) has more than 150 open courses, with more than 1,200,000 visits in 2012. Not only individual courses have been published, but also full Degrees (Nursery, Mines, Energetic Resources and Economics). Our main goal is the quality of the materials. From the very beginning we knew that if we wanted to show open resources we had to do it well. OCW is not only a way to spread knowledge, but also a way to show how we do it. Now we have better courses, and professors have a better knowledge of the possibilities of e-learning. All the materials have to pass a quality control. At the same time, texts and photos that could have problems with the intellectual property are removed.

UC has started to work with MOOC (Massive Open Online Courses) in 2013. We have shown 6 courses in Miriada X with more than 26,000 students. This initiative has had a great repercussion in media. Even though a real accreditation is not offer yet, several ways to do it in the future are being studied (with or without taxes). A lot of professors are waiting to participate. Finally, UCrea is an Open Repository for professors and researchers. The difference with OCW is that you do not have complete courses but only individual documents (more than 800).

Results of using Open Educational Resources: less costs, promotion of the University, good practises in intellectual property rights, better educational resources.
Introduction

One of the sentences that those who have children usually say more is “you should share”. And the truth is that, despite the human propensity to hoard things instead of sharing them, finally the message wins and they realize that share two toys is better than have only one.

Why does it change when we grow up? Why we prefer to have a bit instead to share a lot? Is it only for commercial reasons or is it the same with things that have no economic value?

I will try to analyze it carefully and I will try to put the focus on Education.

First of all: what does it mean to teach a class?

Teach a class is share knowledge. When professors begin to talk they are sharing their knowledge, which can come from their own meditations, from the analysis of data or sources, or from the lecture of books or reviews. But the truth is that they will never be the only owners of these ideas again: students will remember, tell, write or draw them. That knowledge will break the walls of the classroom and will go wherever students want. And this has always happened: from the prehistoric man who showed others how to make a hand axe, to the professor who taught his classes in the European medieval universities. So, why are professors and universities so concerned about their works if these works already have wings?

Traditional universities and traditional intellectual property rights

Traditional universities, the majority in Europe, have a simple model: classes, practises and seminars take place in closed spaces, the classrooms. Activities can be more or less dynamic but, in general, they consist in a professor teaching to an audience.
Sometimes, these classes have also help based in virtual courses where professors can add slides, documents, interactive activities, assessments, forums, blogs or wikis where students can work in a collaborative learning.

Together with these traditional universities there are virtual universities, those that offer full online courses, or full online degrees. Sometimes, together with these virtual resources, students have some face-to-face seminars or tutorships.

Although they are very different ones, they are very similar in the way they protect their educational materials. Those materials are accessible only for their own students, those who have paid the fees.

But the questions are: Have these materials enough quality? What can the students do with them?

First of all, we have to say that it is very difficult to say anything: as long as they are closed courses, we only can imagine. But those who work in collaboration with professors, as well as students, can see them. And, usually, they are not very good materials. Is this professors’ fault? Not at all. Professors’ work is to teach and to research, but they do not have to be good designers, or good multimedia developers or computer experts. We cannot demand good materials to someone whose work is not to create them. We ask an editor to write, not to do the layout.

And what about the intellectual property rights? Are these educational resources open? Do they obey the law? The answer is, usually, no. And this is, almost always, for the difficulty to understand the legislation.

So, I will spend some words trying to explain the intellectual property rights in Spain.

In my country, as well as in the most of Western world, the author has all rights reserved of his work, just since the moment the work was created. It is no necessary to do anything else; register it in an official registry office is not useless, but is not really useful. What kind of rights has the author over his work?

Two types: Moral rights, which are joined with the author; and commercial rights, which are joined with the work.

Moral rights:

1. To decide if the work has to be made widely known
2. To decide if this divulgence must be made with real name,
pseudonym or anonymously
3. To demand the authorship of the work
4. To demand the respect to the integrity of the work
5. To modify the work
6. To remove the work
7. To access to the original work

Commercial rights:

1. Edition
2. Distribution
3. Public communication
4. Transformation (as translation)

Usually, commercial rights last the whole life of the author and 70 years more since his death. After that, work is in the public domain and can be used without authorization, as long as the authorship and the integrity of the work is respected.

Moral rights are imprescriptible, inembargable and unalienable. On the other hand, commercial rights are essentially transferable. Why? Because I, as author, do not have the capacity to go everywhere to see if someone is listening my music from a pirated copy or if someone is reading my book illegally downloaded, or if someone is making a copy of any of my works. That’s the work of publishing companies (with books), record companies (with music) and reproduction rights organisations (to protect authors’ rights in general).

Basically, authors have the law on their side: nobody can do anything with another person’s work if that person doesn’t give authorisation. But, not all the rights are in author’s side. There are also some exceptions or limits to the law. These limits mean that you don’t need permission to use someone else’s work. Some of these limits are:

- News (for example, if the Rolling Stones play in Madrid, a TV channel doesn’t need to ask for permission to tell the new)
- Art works in the street (you don’t need permission to reproduce an art work if it is permanently in the street)
- Concerts in official acts and ceremonies (only if the public can access freely and musicians aren’t paid specifically for this concert).
But there are two more limits that are more important in Education:

1. Private copying exception (which says that you can make a copy of a work from a legal original if you’re not going to make a profit with it). In some countries, although you are allowed to make the copy, you have to pay a tax for it.
2. Quotes for education purposes. You can add “small extracts” of someone else’s work in your own work if:
   • that extract is part of a published work
   • you use this quote to analyse, comment or judge that work, not only to illustrate your own work
   • you use it for educational or research purposes
   • you include author’s name

This is, more or less, easy to understand. But, in the Spanish legislation there is an incomprehensible “addendum” to this article: “Professors of regular education don’t need authors’ authorisation to reproduce, distribute or make public communication of small extracts of works, excluding textbooks and university books, when those actions were made only to help the normal educational activities in the classroom, only with published works, without commercial purposes, and - only if it is impossible - you add author’s name and the source”.

It is almost impossible to understand this article properly. Basically, professors are allowed to use someone else’s works if they use it for educational purposes, non profit, no taking it from textbooks or university books and they have to use it only in the classrooms. But there are a lot of questions: What is an extract? What is a “small extract”? Virtual classrooms are real classrooms? Is a summer course a commercial purpose?

It is obvious that traditional property rights are not as flexible as they should be, specially when there are a lot of authors that don’t want to protect all their rights, but to share their works. That’s the reason of Open Educational Resources’ success: flexibility, adaptability and promotion.
The power of open educational resources

It was in 2001 when OER began with their growth, especially with two initiatives: MIT-OCW and Wikipedia. OCW was born in the MIT as a way to show all the educational resources of that university and to do it freely and openly. Users of OCW were allowed to copy, distribute, transmit and adapt the works with few conditions. On the other hand, Wikipedia tried to create a global encyclopaedia made by internet users: free, adaptable and reusable. But, how to do it if intellectual property rights say that I cannot do almost anything without authorisation? Using new open licenses which are not against, but beside the law: from “all rights reserved” to “some rights reserved”.

What does the law say? That nobody can do anything with my work if I do not give authorisation; so, it is supposed that someone has to ask me for that authorisation. The only thing I have to do is to tell previously to everybody what they can or they cannot do with my works. And I am going to do it in a clear, easy and legal way. There are some models, but the most successful ones are “Creative Commons Licenses”. Creative Commons Licenses have four conditions that you can freely choose:

**Attribution.** You let others copy, distribute, display, and perform your copyrighted work - and derivate works based upon it - but only if they give credit the way you request.

**Share Alike.** You allow others to distribute derivate works only under a license identical to the license that governs your work.

**Noncommercial.** You let others copy, distribute, display and perform your work - and derivate works based upon it - but for noncommercial purposes only.

**No Derivative Works.** You let others copy, distribute, display, and perform only verbatim copies of your work, not derivate works based upon it.

First condition is always necessary because is a moral right; rest of conditions - commercial rights - are transferable. So, can I transmit them to everybody unless to someone specifically? Of course you can, and as long as it is not against the law, it is legal. One of the best parts of CC licenses is that they incorporate a “three layer” design:
1. Human readable layer, that which is easy to understand for everybody.
2. Legal code, written in a language that most lawyers know and love.
3. Machine readable layer, that which is readable for search engines in order to make it easy for the Web to know when a work is available under a Creative Commons license.

These three layers have made CC licenses a powerful tool to spread knowledge all over the world.

Why should I use CC licenses? Because sometimes it is better to show your works freely and openly than to keep your rights. If you are a music star or a bestseller writer, probably you don’t need open licenses. You sell your CDs or your books and you earn a lot of money, and that’s right. But, if you are, for example, a beginning photographer and you want to show your works all around the world, why don’t share them freely? There’s no an only answer, and that is the best: everyone can choose what is best for they. And that’s just the same with professors. Why should you protect your rights over works you are not going to earn money with, if you can show them and spread your knowledge to everybody?

What do OER offer?

Broadcasting. Open licenses make works widely accessible, not only for students, but for all the society. The dissemination of a knowledge that a student can do after going to class is normally incomplete and disorganised. With OER we can share the knowledge in a very different way: open, free, complete and organised. Is it possible to think in a better way to spread universities names and works than with Open Educational Resources?

Reusing. Open is not only free, is reusable as well. UNESCO in 2002 said: “Open Educational Resources are teaching, learning or research materials that are in the public domain or released with an intellectual property license that allows for free use, adaptation, and distribution”.1 So, this is not a vicious, but a virtuous circle: resources are open and everybody can improve them and publish these upgrades, so everybody can get a benefit.

Less costs. In the words of Sir John Daniels, president and CEO of the Commonwealth of Learning, “Nearly one-third of the world’s population (29.3%) is under 15. Today there are 158 million people enrolled in tertiary education. Projections suggest that that participation will peak at 263 million in 2025. Accommodating the additional 105 million students would require more than four major universities (30 000 students) to open every week for the next fifteen years” (Daniels, 2012). How can countries finance this, especially in the current situation of economical crisis?

OER offer access to uncountable resources with open licenses that everybody can use, making unnecessary to create them again, and saving money. That’s good for students and for universities.

Clarity. Opposite to traditional property rights (difficult to understand) OER have an easy definition, so everybody know what can or cannot do with them.

Open educational resources in the University of Cantabria

University of Cantabria has a long experience in Open Educational Resources. Our goal is to transfer knowledge to society.

OpenCourseWare

Our first step in OER was the development of OCW.²

OpenCourseWare development in University of Cantabria

The University of Cantabria was one of the first Spanish universities in this project: we signed the Consortium OCW-Universia in 2006, and we hosted the second OCWC Global meeting in 2007. From the start, our university did not see the OCW project as a burden or an obligation, but as an opportunity to grow and to improve.

Today, five years later, OCW is a lively project in our university, with an important repercussion in education innovation and with a great capacity to promote the activity of those professors with little knowledge of the possibilities of e-learning.

Nowadays, University of Cantabria has more than 150 courses published; some of them are only text materials, but others are real virtual courses, with a lot of different resources (HTML, Flash, self-learning materials, etc.). Nevertheless, the quality of the materials is

². http://ocw.unican.es
as important for us as the satisfaction of the professors who make them. Although there are a lot of professors who do not trust in the virtual education, OCW can be the way to know this new world of possibilities.

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<th>Courses in OCW- UNICAN (2007-2013)</th>
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University of Cantabria is working in two different ways: the individual work of every professor and the common work with several faculties (Nursing, Economics, Mines and Energy Resources).

**Individual courses**

In the individual work, every year a call for new courses is made. Professors have the support of the OCW Department, and we seldom have problems with them, because they are the most interested in the project. Every year we have had between 20 and 30 applications and all the participations have resulted satisfactory. Perhaps, the most difficult aspect is to convince professors that a digital publication is completely different than a traditional paper publication. In our Department we encourage professors to exploit the possibilities of New Technologies and to add videos, animations and self-learning activities.

I want to talk especially about one course in our OCWsite: Biogeography. This course is a full description of the different environments of our planet and of their recent evolution in relation to human activities. So, the course is more than a traditional description of the environments, including the human factors. During the publication of this course, we had the complete help an advice of the professor; we spent a lot of days correcting texts and uploading original images of all kind of environments all over the world.

But, this course is specially important because of the huge number of resources it has: field practices, auto-evaluations, videos, links to Google earth, crosswords, texts in HTML an pdf, flash animations. This is the best example of what it’s possible to do if the professor wants to innovate and has the help of a technological department.
Full Degrees

When we are working with the Faculties, it is possible to have more problems. We make a global agreement with the Degree and all the teachers have the obligation to participate. Sometimes, there are professors that do not want to collaborate. Nevertheless, the work of our Department has gone well, because in the four degrees we only have four courses that haven’t been published. In 2010 we began with two Degrees. Now we are working with four full Degrees: Mines, Energetic Resources, Economics and Nursing. The problem is that in some cases it is very difficult to persuade professors to publish their courses. Nevertheless, we believe that it is better to work only with the professors who want to participate voluntary. The results are always better with them.

Incentives

As a way to stimulate the participation in OCW, first years our department gave a bonus to professors participating in OCW. For every course published, the professor got a remuneration of 500 euros and the same for the faculty in the case of full degrees. So, a faculty can get until 5 000 euros every year for its participation in OpenCourseWare. It’s not, obviously, a big quantity but it helps to implicate the faculties in innovation programs. At the same time, we gave every course a ISBN during the time it was possible. In 2012 we decided that OCW was a consolidated initiative and that it wasn’t necessary to give more economical incentives. And we believe that we were right because the participation is more or less the same with and without incentives. Today, what professors like most of OCW is:

- Visibility and dissemination of their works.
- Improvement in the quality of the resources
- Institutional recognition of Learning Innovation

Impact of OCW

In 2007 we only had 2 000 visits a month. Now we have more than 150 000 visits a month and rising. Likewise, we know that courses are used by professors, students and self-taught people all over the world. Although we are one of the smallest universities in Spain, we have one of the best results in visits to our website. Which are the reasons?
1. Quality. From the very beginning our university knew that if we wanted to show open courses we had to do it well. OCW is not only a way to spread knowledge, but also a way to show how we do it. Now we have better courses, and professors with better knowledge of the possibilities of e-learning. All the materials that we upload have to pass a quality control. First, we talk with the professors to know what they expect about their courses, and we explain to them the characteristics of OCW, answering all the questions. Once we have taken a decision about the most suitable way to upload the course (pdf format, HTML format, flash animations, interactive questions) we begin to work with the educational materials, giving to them homogeneity and improving them as much as possible. At the same time, we remove texts and photos that could have problems with the intellectual property. It is a hard work, but we normally find alternative resources with copyleft, often better than the originals. If we don’t find alternative resources, we make them in the OCW department. At the beginning it was really difficult, but now it is possible because we have a complete OCW department.

2. Metadata. Every file we upload to our website has metadata about: file name, author, date, keywords, license and link to the license. We believe that this is one of the reasons of our success.

3. Promotion of OCW in mass-media. During the last years we have done a big effort of promotion of OCW between professors, students and local and national media. And it is very important to do it, because OCW is an unknown tool for many people.

4. Easy and accessible website. In our website all the materials are easy to find: you can search by category, Degree, year of publication, RSS, most visited courses, highlighted course, etc.

The result of all this work with OER is that in the last six years our OCW site has won five national and two international awards. Local, national and international media have studied our projects, like the New York Times in 2012 (Guttenplan, 2012). And, over all this, our best reward is the big amount of people that use our open educational resources:
Open library repository

Not only the OCW department has worked with OER. The university library has developed the initiative UCREA to show educational and research works as well. In this case they are not courses, but different type of resources, especially papers. This project has also the recognition of the heads of the university who in 2012 show their compromise with open access to academic, scientific and research production of the university.

MOOC

The last initiative in Open Resources has been MOOC (Massive Open Online Courses). It is important to know exactly what every letter means.

M (Massive): there’s no restriction about the people who can take the course.
O (Open): resources are open to everybody after registration, but they are not open as reusable or, at least, it is not explicit; probably the best definition should be “free”, not “open”.
O (Online): resources are accessible via Internet during the time the course is open
C (Course): contents should be organised in modules with a schedule.

Didn’t exist anything similar to this before? Yes, it did. There were a lot of websites with open educational resources and there were a lot of universities offering online courses. But what didn’t exist was the combination of these variables: the possibility to take an online course massive, collaborative, completely free and from a university.

MOOCs came from the United States (Coursera, Udacity) but
know there are a lot of different MOOC sites all around the world. The most powerful initiative in Spanish is Miríada X. This MOOC site has been developed between Universia (a non profit company which gather almost all the universities of the Hispanic world: Spain, Portugal, and Latin America) and Telefonica Learning Services (a subsidiary company from the biggest communication company in Spain). In its first edition, from February 2013 and May 2013, more than 200 000 students have participated in 58 courses from 18 different universities. The six courses from the University of Cantabria involved more than 36 000 students, three times more than the official students of our university. So, even if it is a revolution or not, it is obvious that MOOCs are a phenomenon about which is necessary to think over.

MOOCs can be integrated in traditional and online universities. What do MOOCs provide? They provide:

- Promotion for the University.
- Knowledge transference from University to society.
- Encourage professors to improve their educational resources.
- Can be, if the formula is found, a commercial product.
- It has been said that MOOCs are traditional Universities killers, but we think that is better to think over them with good sense and calm.

**Universities promotion**

MOOCs, and OER in general, are probably the best way to achieve the desirable and necessary knowledge transference from universities to society. As we said before, every time a professor is teaching a class, they are spreading knowledge; doing it with OER is, moreover, a fantastic way to promote university courses and resources.

**Complement to traditional University**

MOOCs are not university killers, but a good possibility to complement traditional education. Nowadays, nobody is thinking in offer full Degrees with MOOC, but just the opposite: MOOCs can be a good option to complement your studies going to those universities which offer just what you are looking for. So, they are a good way to learn for free, to learn paying some taxes (if you need some kind of certification) and to make possible the idea of LifeLong Learning.
Certification

The question that is not yet solved is that of final certification. Basically, there are three possibilities:

1. A final free certification without official validity. It is not possible to know if the person is who they say they are. In some cases, this certification could be enough for some people. This certification would be sent by the platform, not by the university, and it should include a warning saying that this certification is not an official accreditation and that that person is not a registered student of that university.

2. A final certification sent by the university (with its logo and with the professor’s signature) in which it is said that that person has followed the course. Like the first type, it is not possible to know if the person is who they say they are, and, so, it is necessary the same warning. It could be possible to charge a small tax for this accreditation.

3. An official final certification after an exam in an in-person classroom. If you pass the exam, you get your certification. In this case it could be possible to charge official taxes, or whatever tuition the university decide. But it is necessary to think over the infrastructure you need and that it should only be useful if you make some agreements with other universities. Why should you teach an online course all over the world if you after that make people to come to your city to do the exam?

To sum up, MOOCs can be an interesting way to increase the educational offer of the universities and to spread their knowledge. In our case, especially in the Spanish world. But it is necessary to think about the costs of this project, and the possibility of self-financing taxes for the certifications. And, moreover, it is completely necessary to reward professors for their efforts. They are MOOCs’ creators and their work must be recognised and paid.
Conclusions

What have we got?
Since 2007, when we started with OER, we have managed to involve more than 300 professors in open education. The resources of our university have a global dissemination and they are now some of the most searched in the web.

Moreover, the decision of showing our resources has contributed to improve considerably the quality of those materials. And this is good for students, professors and for the university itself.

The recognition of our educational resources has placed our university as a reference in OER and we have participated in very different international forums: Universia Consortium, SCORE (Support Centre for Open Resources in Education), OpenCourseWareConsortium, GUIDE, etc.

Professors have understood the opportunity of showing their own materials and using Open Educational Resources. And they are now more conscious about the importance of observe intellectual property rights.

What do we expect about future?
If you choose Open Educational Resources as part of your institutional policy, you should persist in your conviction, even if there are setbacks. Some universities, for example, don’t find OCW interesting any longer, but those who have insist in the idea have found that OCW is not only a good project itself, but the seed for new open initiatives, like MOOCs.

Universities cannot be ignorant about open knowledge, because it is not a utopia, it is a reality. Nowadays, open knowledge is everywhere: Wikipedia, Youtube, Europeana, ItunesU. Some years ago it was almost impossible to get a photo of somewhere you have never been; now is as easy as going to wikimmedia commons and take it freely and with permission. Historical archives are opening their doors, public libraries are publishing their books, museums are showing their paintings, Google is trying to create a life size map of the world. Why should we close our knowledge? This happens in teaching, but also in research. Now, professors research, universities put the infrastructure and when they have to publish the results, it is necessary to pay the reviews for the publication, and university libraries have to pay the subscription.
Why don’t we use open educational resources to publish the result of university researches?

To sum up: is this a commercial or a social service? 
In every open initiative, there is always the same question: how can we make it sustainable or, even, profitable? 
Every one takes its own way: Youtube puts advertisings in the videos; Wikipedia refuses advertisings and looks for donations; MOOCs could generate profits by accreditations... so, which is the best way? Is this a business activity or a social service? 
In the current economical situation it is obvious that universities cannot waste money, but we cannot either look for an immediate result in every project.
Public universities are supported basically by public funds and, so, the results of their activities must go to society. Before Internet, universities were closed institutions and almost nothing of their activities was known. Nowadays you are important only if you have a good position in Internet. As Cathy Casserly, CEO of Creative Commons, says: “The creators who thrive today are the ones who use Internet distribution most intelligently. In fact, the ones who are most generous with their work often reap the most reward. People used to think of reuse as stealing; today, not letting others use your work can mean irrelevance” (The future of Creative Commons, 2013).
So, OER have to be part of the social mission of universities. We have to see the social service first and, if it is possible, get a commercial return to cover the expenses. Universities are not islands, or, at least, they shouldn’t be. They are part of a big framework and this framework is which has to get a benefit using OER. Universities have to sign a compromise with the society that is supporting them and the best way to get it is making easy the access to a good education for everybody. In this case, we will really foster the idea of LifeLong Learning and we will remember the proverb: “Education is not the filling of a pail, but the lighting of a fire”.
Sintesi

Nel mondo di internet, sempre più autori rinunciano alla protezione del copyright sulle proprie opere, preferendo alla visione tradizionale forme di condivisione delle loro opere in rete. È questo il caso dei materiali didattici universitari, quasi mai soggetti a vincoli economici e, dunque, adatti alle licenze open che l’era di internet ha reso ormai abbastanza diffuse. La filosofia dell’open licence è stata adottata dall’Università di Cantabria (UC) con i progetti OpenCourseWare, Massive Open Online Courses e Open Repository (UCrea). Il sito dell’OpenCourseWare (OCW) conta oltre 150 corsi, e più di 1 200 000 visite nel 2012. Il sito ospita non solamente corsi singoli ma anche interi piani di studio, per nel caso di Scienze infermieristiche e del diploma in Economia. L’obiettivo primario dell’Ateneo riguarda la qualità dei materiali, fondamentale anche e soprattutto nel caso di corsi ad accesso libero. Infatti, l’iniziativa ha il valore aggiunto di valorizzare all’esterno dell’Ateneo le competenze interne, stimolando al contempo i docenti nell’utilizzo delle tecnologie e-learning. Per questo motivo, i materiali sono sottoposti a serrati controlli di qualità, e particolare attenzione è dedicata a rimuovere oggetti o immagini sottoposti a restrizioni del copyright. Dal 2013, inoltre, l’Università ha intrapreso la strada dei corsi MOOC, con sei corsi e più di 26 000 studenti, attivi sul sito Mirada X; iniziativa accolta con ampio favore, per la quale è in corso una riflessione sul tipo di accreditamento da associare ai corsi. L’ultima sperimentazione della UC è UCrea, un archivio elettronico aperto per studenti e professori. A differenza di OCW, in cui i materiali sono aggregati in corsi, UCrea rende disponibili oltre 800 documenti singoli, consultabili in maniera libera in base alle esigenze di informazione e aggiornamento individuali. Iniziative di questo tipo hanno dimostrato notevoli vantaggi, per la riduzione dei costi, la promozione delle attività dell’Ateneo, la diffusione di buone pratiche sul copyright e la condivisione di risorse formative di alto livello.