Freedom of teaching in Greek College Education: the role of the OERs according to academia's perspective

By Iliana Araka, Nikos Koutras, Elisa Makridou

Abstract

This paper, the third in a row, constitutes the final attempt of examining the creation, use, reuse and generally the management of Open Educational Resources in Greek College Education and their relation to freedom of teaching. For this purpose a survey was conducted based on online questionnaires that were distributed to all academic instructors throughout Greece. The results demonstrate, on one hand, the significant role that OERs play in Greek College Education and, on the other hand, their positive effect on freedom of teaching.

Keywords: Open access, Open Educational Resources, freedom of teaching, college education, Greece

1. Introduction

According to Lessig (2002) we can use the equivalence $E=MC^2$ that is free resource, without the permission of Einstein estate and everyone realizes that each society has resources that are either free or controlled. Moreover, due to aforementioned contrast an equilibrium need has been highlighted. Thus, there should be an effective balance between "free" and "controlled" resources.

Nevertheless, these definitions contain specific information and their subject matter is not protected from regulations. Despite this, they can be transformed into alternative explanations such as "public domain" and "intellectual property", alternatively.

It is undeniable that free and/or open access trend derives from an explosion of interest and activity in open access journals which has been largely occurred due to the widespread availability of Internet access since 1990s (Van Schewik, 2010). However, another trend that should be addressed stems from National Academies Press which has provided free online full-text editions of its books since 1994. Hence, it can be easily seen that open access has had a steady growth during the last decades (Bjork, 2004).

After the Lisbon Summit (2000) European Union adopted specific aim concerning its citizens. Therefore, according to directives and relevant announcements within the Commission there were several initiatives and programs regarding knowledge qualifications and their significance in relation to the empowerment of European Community.

The first endeavors regarding open educational resources in Greece came over in 2000 in Aristotle University of Thessaloniki and the National Kapodistrian University of Athens. Yet, the current amount of open educational resources which are based on relevant institutional repositories in Greece is 62 in total (Koutras, 2014). In particular, their basic targets are:

- To present intellectual production of the institutions such as theses, dissertations, scientific journals and publications, multimedia and data etc.
- To preserve archives and
- To give the opportunity to normalize fragmented archives/ data that couldn't be used effectively

1.1 Prior to this study

Comprehending that our society, Greek society, is part of the European Society or the well-known "Information Society", it thus should be examined within the European framework. Furthermore, this research on education viewed as a social matter can be used as a beneficial outcome and a "pillar" for an alternative open access policy among European countries starting from Greece. Therefore, our research team initiated a scientific approach based on relevant literature and debate within the 4th International Conference on Information Law and Ethics (ICIL) in 2011. In addition, there was a presentation of the preliminary results of our online survey (via online questionnaires) in relation to institutional repositories of open access concerning College Education within the 5th ICIL. In particular:

1. Regarding 4th ICIL in 2011: A detailed study was conducted pursuing to monitor the situation in Greece as far as the educational resources in college education are concerned at the time being. The study objective was to identify the amount and type of educational resources, open, locked, registration required courses, the types of software platform used and matters regarding metadata and IP licences.

In order to reach the goals of this attempt, information was gathered via onsite (online) inspection of every college in Greece, on January 2011. The sampling covered the entire population of Greek colleges, according to official data provided by the competent ministry, and comprised a total of 38 colleges, 23 of which are Universities and 15 Technological Education Institutes (Ministry of Education Life long learning and religious affairs, 2011). The amount of the courses of each college was calculated separately resulting in a total of 18.527. This figure corresponds to visible courses only, as some college VLEs doesn't give access to any data. Each course forms a unique entity, that is, every course is counted once even if it appears in more than one software platforms a college may use and

2. Regarding 5th ICIL in 2012: Another online survey was conducted aiming at monitoring the current situation as far as the Open Educational Resource use and freedom of teaching in college education in Greece were concerned at that time. The survey objective was to classify whether the academia in Greece create OERs or not, in which way OERs are being used by academics of all disciplines and how they are related to freedom of teaching.

The findings of both studies show the trend towards open educational content and the shift of academia from traditional forms of educational material and its distribution channels to alternative forms of educational content creation and management and host platforms, such as OERs and open access repositories.

1.2. Education and "freedom of teaching"

Education is of paramount importance for the knowledge and the growth that can offer to societies. Teaching, as means of education, can lead to further research and reflections. Moreover, research itself leads to innovation. These three parameters, knowledge-research-innovation, form the trinity of teaching.

Article 16 of the Greek Constitution and the Greek statute 4009/2011 (2011) illustrate the need for freedom of teaching, empowerment and diffusion of relevant information that should be the "pillar" of current educational infrastructure. Furthermore, the aforementioned legislation can be used as crucial regarding freedom of teaching and its subject matter which is analyzed below.

In all societies, Greek included, teaching methods are crucial for the role they play in terms of welleducated personality and effective citizen formation. The use of open educational content within teaching in Greece can be the basic means which will further assist educational process as an alternative educational method.

Greek Constitution (article 16, paragraph 1) and the aforementioned Greek statute 4009/ 2011 (article 3) are the pillars for the following approach of freedom of teaching:

Freedom of Teaching, as a means within the wider fields of education and research, is crucial for those (educators, professors, instructors and teachers) who are responsible for spreading information and knowledge related to growth within the infrastructure of education in Greece. Moreover, this term is the basic instrument for teaching as social work.

Freedom of teaching is synonymous to freedom to teach as well as to being taught. In other words, it assures, if accomplished successfully, the process of scientific knowlede possession and transmition without limitations and interventions.

It concerns mainly the academic community that can and actually has independence on both the content creation (for lectures and research) and the scientific research and teaching method; procedures that have a reciprocal relationship and that shall be carried out in an ethical, deontological and in no case illegal manner, so as for the freedom to be able to be preserved.

Freedom of teaching contributes to the free and unlimited research and to public display of research results for review and objection. This way, freedom of teaching enhances social and scientific progress and can offer solutions to contemporary problems.

2. Methodology

The survey objective is to identify whether the academia in Greece creates OERs or not, in which way OERs are being used by academics of all disciplines and how they are related to freedom of teaching. For this purpose an online survey was conducted.

Information has been collected throughout Greece using an online questionnaire from March 2012 to March 2013. The questionnaire was founded on the basis of one used by OECD in 2007 (OECD, 2007) for a similar survey. Before March 2012 a pilot study was conducted, during which Dr. Aphrodite Malliari and Pr. Maria Bottis provided us with constructive feedback. Ameliorations were applied and the questionnaire was released.

The questionnaire consists of 13 questions and is divided into 2 sections. The first asks for general information and the second focuses on the creation and use of OERs. All questions are closed but the last one that is open ended, giving the respondents the opportunity to leave their comments (annex A).

The questionnaire is addressed to all academics of all public universities in Greece. Communication with the colleges was done via email. In order to be sure that we would receive answers properly we contacted the Network Operation Centers (NOCs). These centers gather the contact information of academics and they can send massive emails. Nevertheless, some NOCs didn't cooperate so we had to visit the college web sites individually in order to collect the information that we needed. Moreover we sent 3 reminders during the period the survey was open.

There were collected and processed 489 questionnaires that cover all scientific fields and academia levels of 25 out of 38 (official data provided by the competent ministry) public colleges all over Greece. In particular, colleges that participated covered the longitude and latitude of the country, giving us the satisfaction of a great scale survey that will allow a more safe generalization of the results obtained (annex B).

The collected data of this quantitative study have been processed using SPSS 20 and have produced descriptive statistics. The correlations among data, through variable cross tabulation, were done taking into account the qualitative factor of scientific field. The preliminary results of the study were presented in ICIL 2012 and here follow the final results.

3. Final results

Starting from the table 1 we can see the respondents per faculty level. Mostly lower faculty levels seem to be more interested in OER related matters as 29,9% were adjunct instructors, 21,5% lecturers and 20,3% were assistant professors.

Table 1: Faculty level				
Faculty level	Valid Percent			
Lecturer	21,5			
Assistant professor	20,3			
Associate professor	12,9			
Professor	15,4			
Adjunct instructors	29,9			
Total	100,0			

Responses were collected by all scientific fields. However, most of the respondents belong to Social and Economic Sciences (20,75%), Humanities and Arts (20,33%) and Natural Sciences, Mathematics and Informatics (16,6%) (chart 1).



Chart 1: Scientific Fields

Below is presented the analysis of the answers of the main part of the questionnaire. The analysis is based on correlating the scientific field with other factors. This way more specific and meaningful data are produced.

The great majority of the respondents do not participate in some OER related program and/or initiative (78,9%). Humanities, social and economic and natural sciences, mathematics and informatics are those with the greater percentages of no participation in some OER program/initiative among others (chart 2 and annex C).



Chart 2: Participation in OER initiative and/or program



Among others, all disciplines create OERs to a limited extent, showing percentages over 50% each, as shown in chart 3.

Chart 3: OER creation

Among others, all scientific fields consider as the main inhibitor, that prevents professors from using OERs, the "Lack of information about OER creation and use". "Lack of administration support" and "Lack of a model for open content initiatives" appear to prevent from using OERs to a great extent, as well as "Lack of time". Only Earth science, agriculture and veterinary differentiates considering that "Lack of time" prevents the OER use to a limited extent. "Lack of interest in new pedagogical methods" is a factor that prevents from using OER moderately. "Lack of equipment" seems to be no obstacle for the use of OER except from the discipline of Business administration and management that stated it as a strong disincentive (table 2).

	Lack of information about OER creation and use	Lack of time	Lack of equipment	Lack of interest in new pedagogical methods	Lack of a model for open content initiatives	Lack of administra tion support
Education and teaching	\checkmark	\checkmark		~√	\checkmark	~
Humanities and Arts	\checkmark	~	~√	~√	~	~
Social and economic sciences	~	~		~√	~	~
Business administration and management	V	~	V	~√	V	~
Natural sciences, mathematics and informatics	~	~		~√	~√	
Mechanics and engineering	~	~	~√	~√	~	~√
Earth science, agriculture and veterinary	~			~√	~√	~
Health sciences	\checkmark	\checkmark	~√	~√	~	~

Table 2: Inhibitors that prevent professors from using OERs

This survey is interested in the benefits that result from OER use in classroom also. The next table (table 3) rates the importance of those benefits according to each scientific field.

All benefits that result from OER use in classroom presented below, considered of a great importance by all disciplines. Particularly, "Reducing cost for students", "Reducing costs of course creation for the university", "Becoming independent of publishers" and "Creating more flexible educational Materials" are the most important advantages to all disciplines. As important benefits are considered the following: "Gain access to best possible resources", "Promotion of scientific research and education as publicly open activities", "Outreach to disadvantaged Communities". Only for the later Mechanics and engineering and Health sciences believe that it is neutral tending to important.

Table 3: Importance of benefits that result from OER use in classroon

	Gain access to best possible resources	Promotion of scientific research and education as publicly open activities	Reducing cost for students	Reducing costs of course creation for the university	Outreach to disadvantaged Communities	Becoming independent of publishers	Creating more flexible educational Materials
Education and teaching	Important and Very important	Important and Very important	Important	Important	33,3 (important and of little importance)	Very important	Very important
Humanities and Arts	Important and Very important	Important and Very important	Very important	Very important	Very important	Very important	Very important
Social and economic sciences	Important	Very important	Very important	Very important	Very important	Very important	Very important
Business administration and management	Important and Very important	Very important	Very important	Important	Important	Very important	Very important
Natural sciences, mathematics and informatics	Important	Important	Very important	Important and Very important	Important	Very important	Important
Mechanics and engineering	Very important	Important	Very important	Very important	Neutral tending to important	Important	Important
Earth science, agriculture and veterinary	Important	Important	Important	Very important	Very important	Important	Important
Health sciences	Important	Important	Important	Important	Neutral tending to important	Very important	Important and Very important

In the question whether faculty use OERs in classroom, all disciplines but two answered "Yes, to a limited extent". Only natural sciences, mathematics and informatics and earth science, agriculture and veterinary stated that they use OERs in classroom extensively (chart 4).



Chart 4: OER use in classroom

In relation to the origin of the OERs used by faculty of all disciplines the largest percent, by far, is found in the own creation of the OER. Faculty of all scientific fields, except from Education and training, use a lot those that have been retrieved freely on the internet also. Less academics stated that The OER used has been created by colleagues of their institution. Very few from all disciplines answered that The OER used has been bought from some editor. Academics from health sciences give the same percentage for OERs that have been created by colleagues of their institution and those that have been bought from some editor. Mostly academics of earth science, agriculture and veterinary than the other disciplines stated that some of the OER used come from collaborations with other educational institutions (table 4).

	The OER used has been created by you	The OER used has been created by colleagues of your institution	The OER used has been retrieved freely on internet	The OER used comes from collaboration s with other educational institutions	The OER used has been bought from some editor etc.
Education and training	70,00%	10	20	10	0
Humanities and Arts	76,70%	18,6	55,8	18,6	4,7
Social and economic sciences	65,10%	20,9	51,2	11,6	2,3
Business administration and management	64,30%	35,7	64,3	14,3	0
Natural sciences, mathematics and informatics	76,70%	16,7	53,3	6,7	3,3
Mechanics and engineering	58,80%	5,9	70,6	17,6	0
Earth science, agriculture and veterinary	76,9%	7,7	38,5	38,5	0
Health sciences	76,9%	23,1	69,2	15,4	23,1

Table 4: Scientific field and OER origin cross tabulation

In the question whether academics would grant unaltered ER to other colleagues for educational purposes, faculty of all disciplines agreed provided that their status as main creator would be kept. Many academics of Social and economic sciences (40%) and Natural sciences, mathematics and informatics (43,6%) would also grant unaltered ER to other colleagues for educational use without restrictions among others (chart 5).



Chart 5: Grant unaltered ER to other colleagues for educational purposes

All disciplines permit content change and republish of a new version of the ER for educational purposes given that there is some kind of acknowledgement, among others. Precisely, faculty of Education and training, Humanities and arts and Social and economic sciences permit changes only when their rights as primal creators are protected by some license. Those of Business, administration and management, Natural sciences, Mathematics and informatics, Mechanics and engineering and Earth science, agriculture and veterinary agree for their content to be altered only when their name is simply acknowledged. Health sciences gather the same high percentage on both of the above (40% equally) among others (chart 6).



Chart 6: ER content change and republish of a new version for educational purposes

Faculty from all disciplines agree to all student (52,6%) and professor (41,8%) access to their educational material among others. Almost all scientific fields "don't want anybody to apply changes to the content of their educational material" (36,6%). Only percentages of Natural sciences, Mathematics and informatics do not have important fluctuation (Mostly disagree 20,5%, neutral 20,5%, Strongly agree 25,6%). All disciplines believe that "supplemental changes to their educational material by other colleagues of the same field enhance its quality" (40,9%). Moreover, all fields, but faculty of Education and training who have a neutral opinion, believe that "the disposal of their material for open use benefit a lot of students all over Greece" (44,6%). All disciplines believe among others that "whatever interference with their educational material by other colleagues would alter its initial content and purpose" (34,2%). Education and training express a neutral opinion respectively. All disciplines disagree about the plagiarism factor but humanities and arts that strongly agree (28,5%). Finally, everybody strongly agree that "use and reuse of educational material generally promotes new ideas and enhances scientific research" (38,3%) (table 5).

	I don't like all students to have access to my educational material but only those I choose	I don't like all professors to have access to my educational material but only those I choose to	I don't want anybody to apply changes to the content of my educational material	I believe that supplemental changes to my educational material by other colleagues of the same field would enhance its quality	I believe that the disposal of my material for open use would benefit a lot of students all over Greece	I believe that whatever interference with my educational material by other colleagues would alter its initial content and purpose	I believe that whatever change to the content of my educational material would constitute plagiarism	I believe that use and reuse of educational material generally promotes new ideas and enhances scientific research
Education and training	Strongly disagree	Strongly disagree	Mostly agree	Mostly agree	Neutral	Mostly disagree / Neutral	Mostly disagree	Strongly agree
Humanities and Arts	Strongly disagree	Strongly disagree	Strongly agree	Mostly agree	Mostly agree / Strongly agree	Neutral / Strongly agree	Strongly agree	Strongly agree
Social and economic sciences	Strongly disagree	Strongly disagree	Strongly agree / neutral	Mostly agree	Mostly agree	Neutral	Mostly disagree / Neutral	Mostly agree
Business administra- tion and manage- ment	Mostly agree/ Strongly disagree	Mostly disagree	Strongly agree	Mostly agree	Mostly agree	Mostly disagree	Strongly disagree / Mostly disagree	Mostly agree
Natural sciences, mathema- tics and informatics	Strongly disagree	Strongly disagree	Mostly disagree 20,5 / neutral 20,5/ Strongly agree 25,6	Mostly agree	Mostly agree	Mostly disagree	Mostly disagree	Strongly agree
Mechanics and engineering	Strongly disagree	Strongly disagree	Strongly agree	Mostly agree	Mostly agree	Neutral	Neutral	Strongly agree / Mostly agree
Earth science, agriculture and veterinary	Strongly disagree	Strongly disagree	Strongly agree	Mostly agree	Mostly agree	Neutral	Neutral	Mostly agree
Health sciences	Strongly disagree	Mostly disagree	Strongly agree	Strongly agree	Mostly agree / Strongly agree	Neutral	Mostly disagree	Strongly agree
Other	Strongly disagree	Strongly disagree	Strongly agree	Strongly agree	Mostly agree	Neutral	Mostly disagree / Neutral	Strongly agree
Total	Strongly disagree (52,6%)	Strongly disagree (41,8%)	Strongly agree (36,6%)	Mostly agree (40,9%)	Mostly agree (44,6%)	Neutral (34,2%)	Neutral tend to dissagreement (28,5%)	Strongly agree (38,3%)

4. Conclusions

It is observed that the biggest percentage of respondents consists of human-centered sciences (~41%), which is quite reasonable as access to educational information is a human-centered process itself. Although we are all members of information society, some manage technology better than others due to various factors. The most influential of them are age and professional status. In this study, it is obvious that these factors prevailed in terms of type of respondents. Their majority consists of younger people who consequently belong to lower faculty level. Younger people are more familiar with new technologies and OER creation and management require at least the basic technology skills; so, it is not at all surprising that most of the respondents belong to this age category.

In terms of education and research in Greece there is a need for information. Unfortunately, this need is not covered due to OER relevant information, policy and funding lack. This is also the reason why not so many academia members are not involved in any OER program and/or initiative. The fact that academia gave incoherent answers when asked to mention OER programs or initiatives they are participating in, enhances the idea of OER respective information lack (annex D). In addition, results from the question about the inhibitors that prevent professors from using OERs were focused on lack of information about OER creation and use, lack of administration support and lack of a model for an open content initiative.

Furthermore, economic issues seem to be a factor of a great importance. The difficult economic situation of Greece, in general, and the Greek public college funding reduction, in specific, are depicted in the fact that academia ask for an economic boost and the existence of central policies concerning OERs. The same idea appears in the benefits that academia believe that result from the use of OERs too. These refer mainly to course cost reduction for students and professors, to becoming independent of publishers (avoid getting involved in any economic relation to publishing agencies) and in general to seeking the creation for more flexible educational materials. All the above, are directly connected to the current economic situation in Greece that imposes state budget and expenditure cuts; and are related to the demand of academia for more flexible educational materials with more quality and less cost through academia collaboration by creating, using and reusing, under specific terms mentioned below, OERs in order to achieve better educational content and enhance freedom of teaching in classroom.

All disciplines use OERs in classroom extensively and these are mostly created by the academia themselves or found freely on the Internet, due to economic difficulties as mentioned earlier. It has to be highlighted that academia in Greek public colleges are quite productive as far as the educational and research content are concerned and show high interest in OER creation, though not through a coordinated manner due to OER policy lack. Only human-centered sciences use OERs to a limited extent in contrast to natural and earth sciences that use OERs extensively. This is reasonable, as the latter has developed, since a long time ago, the culture of interchange of scientific material for teaching and research through *arXiv.org* without having violated intellectual property rights.

All academia tend to give away their material as an educational resource to other colleagues having assured that they will be acknowledged as primal creators. It is remarkable that a great percentage of faculty of social and natural sciences would give their material away for use and reuse without any restriction. In terms of the copyright culture we are used to it is reasonable and fair for someone to not

want his name out of a work that has done. On the other hand, the findings of this study, show high involvement of faculty in finding new and more flexible ways for their material to be outreached. Very few academia members concern about traditional copyright licensing and most of them tend to be open for a simple acknowledgement and an alternative or none license for educational purpose only materials. But when it comes to research material sharing, they express their need for intellectual protection by some license (either traditional copyright or other alternative) but again one that would be costless or of low cost.

According to the findings of this study and the reality of the absence of economic resources in Greek colleges it is significant that faculty, though mentioning a lot the economic factor to express the difficulties they face, appear to be ready to take action regarding educational and research content creation and management through alternative forms, such as OERs for which they recognize a list of benefits, as presented earlier in the results presentation, among them the enhancement of freedom of teaching.

The question that rises is how the altered material infringes or not freedom of teaching. Faculty believe that OER creation, use and sharing enhance freedom of teaching, widening access to educational material both for students and professors, benefiting students all over Greece, enhancing content quality, promoting new ideas and enhancing scientific research. Thus, the use of OERs seems to conform to the trinity of teaching and verify in the most obvious way (also according to the results of this survey at the national level) the definition of freedom of teaching.

Though OERs result to be of great importance it is more significant to be placed within a framework of a central policy at the national level, as faculty mention.

5. OER policy for college education in Greece that ensures freedom of teaching

Here are presented the main characteristics an OER policy for college education in Greece should have, according to the analysis of the results of this study. This proposal resulted from the need of the academia expressed strongly throughout this research. Therefore, our proposal constitutes a policy structure that includes the main following key features that will function as a path for further development according to even more specific needs that might arise.

- ▲ OER creation and sharing has to be part of the faculty workflow to enhance innovation and freedom of teaching.
- ▲ The presence of a license for the protection of the work created and shared is essential.
- ▲ A central repository will host the OERs to be created, shared and managed.
- ▲ A central policy on intellectual property rights according to EU and Greek legislation needs to be formulated.
- A central policy on data, metadata and content preservation is essential.

All the above will form a social ecosystem where information and knowledge will circulate under common rules and practice upon a single platform (i.e. the repository) ensuring content, enhancing academia collaboration, advancing knowledge and leading to innovative outcomes.

The main benefits that result from such policy include the following:

- ▲ Enhancement of collaboration in large scale among academics at the national level.
- A Peer review of educational and research material.
- ▲ Innovative content production, as academic communities build upon the material of others.
- ▲ Better quality and updated content for students.
- ▲ Educational content open for all academic community (access enhancement).
- ▲ Author and content visibility.
- ▲ Proven plagiarism control
- ▲ Scientific research enhancement.
- ▲ New ideas promotion.

It becomes quite clear that widening education practice through the use of OERs that enhance freedom of teaching is of the benefit of the society as a whole having in mind that education is a social procedure itself that engages, or should engage, large communities. As analyzed earlier education leads to knowledge and innovation, key factors of the European education policy as well. That is why Greece needs to rethink educational practice and exploit the advantages that result from the use of OERs as presented in this study in order to produce even more skilled professionals and become itself a more competitive player in the education market. According to this study, academia is willing to adapt their educational practice, but, without a central policy, only individual efforts are made that are not enough to establish a new way education should be seen in the country.

6. References

- 1. Bjork B. (2004) 'Open access to scientific publications an analysis of the barriers to change?', Information Research, Vol. 9, No. 2, paper 170
- 2. European Commission (2000) "Lisbon European Council Conclusions of the Presidency", Online at http://www.europarl.europa.eu/summits/lis1_en.htm#
- 3. European Commission (2013) "Horizon 2020: Guidelines on open access to scientific publications and research data in horizon 2020" Online at http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-pilotguide_en.pdf
- 4. Ginsburg J. (2002) 'How Copyright Got a Bad Name For Itself', Columbia Journal of Law and the Arts, Vol. 26, No. 1
- 5. "Greek statute 4009/ 2011" (2011) Online at <u>https://modip.aegean.gr/?q=system/files/N.4009-2011.pdf</u>
- 6. Koutras N., Araka I., Makridou E. (2011) 'Institutional Access Repositories in College Education: A proposal for their role in Open Educational Resources in Greece'
- Koutras N. (2010) 'Open Access Repositories', in the proceedings of the 3rd International Conference on Information Law-An Information Law for the 21st century, p. 476-489, Nomiki Vivliothiki.
- 8. Koutras N. and Bottis M. (2014) 'In search for one sole institutional repository in Greece: adventures and solutions for an integration of repositories towards bridging digital divide', American International Journal of Contemporary Research, Vol. 4, No.2 (under publication)
- 9. Lessig L. (2006) 'Free Speech', Code version 2.0, Chapter 12, pp. 233-276, Basic Books.
- 10. Lessig L. (2002) 'The architecture of innovation, Duke Law Journal, Vol. 51, p. 1783
- 11. Makridou E., Araka I., Koutras N. (2012) 'Open Educational Resources and Freedom of Teaching in College Education in Greece: Rivals or Fellows?'
- 12. Ministry of Education Life long learning and religious affairs (2011) Online at http://www.ypepth.gr/el_ec_category131.htm / accessed 10.01.2011
- 13. OECD (2007) "Giving Knowledge for Free: the emergence of open educational resources" Online at http://www.oecd.org/edu/ceri/38654317.pdf
- 14. Spichtinger, D. and European Regional Working Group of the Global Research Council (2011) "Open Access in Horizon 2020 and the European research area" Online at <u>http://repozitar.techlib.cz/record/478/files/idr-478_1.pdf</u>

- Tehranian J. (2007) 'Infringement Nation: Copyright Reform and the Law/ Norm Gap, Utah Law Review, Vol. 2007, p. 537
- 16. Van Schewik B. (2010) 'Internet architecture and innovation', 592 pp., ISBN: 978-0262013970
- 17. World Economic Forum (2014) 'Norms and Values in Digital Media: Rethinking Intellectual Property in the Digital Age', Industry Agend, REF 130114

7. Annexes

7.1. Annex A: Questionnaire

Questionnaire survey

- The purpose of this survey is to identify the usage percentage of Open Educational Resources (OERs) by professors of higher education in Greece; also, to investigate issues concerning use, sharing and reuse of OERs that may either infringe freedom of teaching or promote science and research.
- Your answers are anonymous and confidential. The questionnaire consists of 12 questions and you will need about 5-6 minutes to complete it.

Thank you, Elisa Makridou, Iliana Araka, Nikos Koutras lisgroup2011@yahoo.gr

General Information

1) Please select the university you are working for*

- () National and Kapodistrian University of Athens
- () National Technical University of Athens
- () Aristotle University of Thessaloniki
- () Athens University of Economics ad Business
- () Agricultural University of Athens
- () Athens School of Fine Arts
- () The Panteion University of Social and Political Sciences
- () Piraeus University
- () University of Macedonia
- () University of Western Macedonia
- () University of Patras
- () University of the Peloponnese

- () University of Ioannina
- () Military schools
- () Democritus University of Thrace
- () University of Thessaly
- () Ionian University
- () University of Crete
- () Technical University of Crete
- () Aegean University
- () Harokopio University
- () Hellenic Open University
- () International Hellenic University
- () Technological Educational Institute of Athens
- () Technological Educational Institute of Western Macedonia
- () Technological Educational Institute of Epirus
- () Technological Educational Institute of Thessaloniki
- () Technological Educational Institute of Ionian Islands
- () Technological Educational Institute of Kavala
- () Technological Educational Institute of Kalamata
- () Technological Educational Institute of Crete
- () Technological Educational Institute of Lamia
- () Technological Educational Institute of Larissa
- () Technological Educational Institute of Messolonghi
- () Technological Educational Institute of Patras
- () Technological Educational Institute of Piraeus

- () Technological Educational Institute of Serres
- () Technological Educational Institute of Chalkida

2) Academia level*

- () Lecturer
- () Assistant professor
- () Associate professor
- () Professor
- () P.D. 407/80
- () Adjunct lecturer (labs)
- () Adjunct lecturer (theory)

3) Please select you scientific field*

- () Education and training
- () Humanities and Arts
- () Social and economic sciences
- () Business administration and management
- () Natural sciences, mathematics and informatics
- () Mechanics and engineering
- () Earth science, agriculture and veterinary
- () Health sciences
- () Other

4) Have you participated or are you participating at the moment in some program or initiative concerning open access educational material?

() Yes

() No

If yes, please specify (name or url etc.)

Creation and use of open access educational material

- 5) Do you create open educational resources (OERs)?
- () No, not at all
- () Yes, to a limited extent
- () Yes, extensively
- 6) How much do you believe that the following prevent professors from using open educational resources? Please use this scale from 1 to 5 (where 1= not at all, 2= little, 3= somewhat, 4= a lot and 5= very much).

	1 2 3 4 5
Lack of information about OER creation and use	()()()()()
Lack of time	()()()()()
Lack of equipment	()()()()()
Lack of interest in new pedagogical methods	()()()()()
Lack of a model for open content initiatives	()()()()()
Lack of administration support	()()()()()

7) How important do you consider the following benefits that result from OER use in classroom? Please use this scale from 1 to 5 (where 1= unimportant, 2= of little importance, 3= of medium importance, 4= important and 5= very important).

Gain access to best possible resources	()()()()()
Promotion of scientific research and education as publicly open activities	()()()()()
Reducing cost for students	()()()()()
Reducing costs of course creation for the university	()()()()()
Outreach to disadvantaged communities	()()()()()
Becoming independent of publishers	()()()()()
Creating more flexible educational materials	()()()()()

8) Do you use open educational resources in your lectures?

If not, please go to question <10>

- () No, not at all
- () Yes, to a limited extent
- () Yes, extensively

9) The open educational resources you use: (multiple selection)

- [] The OER used has been created by you
- [] The OER used has been created by colleagues of your institution
- [] The OER used has been retrieved freely on internet
- [] The OER used comes from collaborations with other educational institutions
- [] The OER used has been bought from some editor etc.

1 2 3 4 5

10) Would grant your unaltered educational resources to other colleagues for educational purposes?

- () Yes, without restrictions
- () Yes, provided that my status as main creator would be kept
- () No

11) Would you permit content change and republish of a new version of your educational material for educational purposes?

() Yes, without restrictions

() Yes, but only when my name is acknowledged

() Yes, but only when my rights as primal creator are protected by some license (e.g. ccopyright, creative commons)

() No

12) Use, sharing and reuse of OERs react positively and/ or negatively on freedom of teaching, that is the control of the instructor on the educational process and her/his choice about the way in which she/he manages her/his subject content and with whom she/he will share it. According to the above, how much do you agree or disagree with the following?

Please use this scale from 1 to 5 (where 1= strongly disagree, 2= mostly disagree, 3= neutral, 4= mostly agree and 5= strongly agree).

	1	2	3	4	5
I don't like all students to have access to my educational material but only those I choose	()	()	()	()	()
I don't like all professors to have access to my educational material but only those I choose to	()	()	()	()	()
I don't want anybody to apply changes to the content of my educational material	()	()	()	()	()
I believe that supplemental changes to my educational material by other colleagues of the same field would enhance its quality	()	()	()	()	()
I believe that the disposal of my material for open use would benefit a lot of students	()	()	()	()	() 25

all over Greece

I believe that whatever interference with my educational material by other colleagues () () () () would alter its initial content and purpose

I believe that whatever change to the content of my educational material would () () () () constitute plagiarism

I believe that use and reuse of educational material generally promotes new ideas and () () () () enhances scientific research

13) Please feel free to add any other comment you consider useful about OER use and freedom of teaching.

Thank you.

7.2. Annex B: Colleges - Respondents

College	Valid Percent
National and Kapodistrian University of Athens	2,5
National Technical University of Athens	0,4
Aristotle University of Thessaloniki	32,4
Athens University of Economics and Business	5,8
Pandeion University for Social and Political Sciences	0,8
University of Macedonia	5,8
University of Western Macedonia	0,4
University of Patras	1,7
University of the Peloponnese	0,4
University of Ioannina	1,7
Military School	0,4
Democritus University of Thrace	0,8
Ionian University	4,1
University of Crete	0,8
Technical University of Crete	0,4
University of the Aegean	0,8
Hellenic Open University	14,5
International Hellenic University	0,4
Technological Educational Institute of Athens	0,4
Technological Educational Institute of Epirus	0,8
Alexander Technological Educational Institute of Thessaloniki	19,9
Technological Educational Institute Of Kalamata	0,4
Technological Educational Institute of Crete	0,4

Technological Educational Institute Of Patras	2,5
Technological Educational Institute of Central Macedonia at Serres	1,2
Total	100,0

7.3. Annex C: Participation in OER initiative or program

Scientific field	Participation in OER initiative or		
	program		
	Yes	No	Total
Education	30,0%	70,0%	100,0%
Humanities and Arts	18,8%	81,2%	100,0%
Social and Economic Sciences	18,8%	81,2%	100,0%
Business Administration and Management	10,5%	89,5%	100,0%
Natural Sciences, mathematics and informatics	23,1%	76,9%	100,0%
Mechanics and engineering	25,0%	75,0%	100,0%
Earth science, agriculture and veterinary	29,4%	70,6%	100,0%
Life sciences	6,7%	93,3%	100,0%
Other	33,3%	66,7%	100,0%
Total	21,1%	78,9%	100,0%

7.4. Annex D: Programs/Initiatives Greek academia participates in

blackboard		
CD-ROM about E-CLASS of Aristotle University of Thessaloniki		
cmpus.uom.gr		
e-class		
GENESIS		
hellenic academic opencourses		
http://eclass.farm.teithe.gr		
HYPERTEXT MBA 60		
LAMS		
lamscommunity.org/lamscentral/		
moodle		
OPEN ACCESS EKT		
opencourses		
pencourses.auth.gr		
rcel.enl.uoa.gr/xenesglosses/		
SFBear		
socrates-virtual student mobility		
www.geo.auth.gr/gr_e-teach.htm		
www.open-ed.eu		
Hellenic Open University classes		