

OPEN TEACHING PRACTICE: REFLECTIONS ON THE USE OF OER IN EDUCATIONAL ACTIVITIES

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Received for publication on 1.18.2018

Approved on 1.26.2018

Abstract

This article presents results from a study carried out with Brazilian and Portuguese professors whose objective was to understand the dynamic of using and sharing online resources in their pedagogical practices. With a qualitative foundation, the instruments for data collection were online surveys and interviews recorded with professors. After reflecting on the main challenges faced, the presentation of recommendations could collaborate towards encouraging producing and sharing Open Educational Resources (OER) and, consequently, broadening the democratization of knowledge.

Keywords: Open Educational Resources. E-learning. Open education.

1. Introduction

In a globalized world producing technologies that are increasingly efficient in allowing access to information, especially after the advent of the worldwide web of computers, it has become imperative to hold a broad debate regarding the potential uses of content available online.

This situation has revolutionized the way we communicate, produce and make knowledge available. In the field of education, for a long time, knowledge has been restricted to people who were in a position to participate in an academic environment. However it has become accessible more easily and freely on the web, enabling more people, educators or students to consult or even become producers of new content, making it available on the internet, formally or informally.

In this sense, this movement popularizing access to knowledge has made the debate on authors' rights more pressing, as well as what is considered plagiarism and what the limits are for using content freely accessed on the internet. In this context, educators see themselves among those who believe knowledge should be accessible to everyone, in the sense of stimulating open and

universal education, and those who are concerned with restrictions on authors' rights and intellectual property. This concern is also legitimate since it is common to see a disrespect for the essential principles already guaranteed by copyright laws, which leads to the need for establishing rules for using this content.

With the purpose of organizing the production and sharing of content on the worldwide web of computers, the creation of a structured global movement started at the end of the 1990s, when sharing and using educational resources began to be defined in the scope of national as well as international policies. The Cape Town Open Education Declaration (CAPE..., 2007) is a result of the debates that aim to establish rules that can enable a steady increase in the practice of open education.

According to Cardoso (2014), the concept of "open" includes multiple dimensions. Moreover, Weller (2012) defines it in seven dimensions, which are: Open source (mainly free software, whose movement is based in higher education); Open educational resources (application of open source principles to the distribution of educational content); Open courses (courses offered online, with various payment models or free); Open research (approaches to research, including crowdsourcing and open and free online conferences); Open data (not only the free sharing of data, but also the development of standards to interconnect the vast quantities of available data); Open application program interfaces (which allow software creators to build tools and codes that can be used with the data of a previously existing application, as in the case of Facebook and Twitter); and Open access publishing (fast and inexpensive online publication, made freely available with open, peer-review models).

There are four fundamental freedoms of OERs: use, improvement, reorganization and distribution

In this context, a movement has emerged in the protection of the access, use and reuse of Open Educational Resources (OER), promoted by an international community based on the intensified use of the internet. OERs can be defined, as indicated in the 2012 Paris OER Declaration, like teaching, learning, and research materials made available on any media or support in the public domain, or with an open license so that they can be used or adapted by third parties (UNESCO, 2013).

There are four fundamental freedoms of OERs: use, improvement, reorganization and distribution. To protect and regulate the treatment of these resources available on the internet, licenses were defined that specify the authorized application of a determined content. The most popular is the Creative Commons¹ licenses since users quickly understand them.

Observing the various OER initiatives implemented, D'Antoni (2009) identifies the desire to educate more equally, making use of the growing connectivity around the world. However, indicates that there are many more challenges ahead, considering that the web is still not omnipresent. Therefore, she believes that there is a long path to follow, to contribute to achieving education for everyone.

In Europe, in 2014, the European Parliament approved a European Commission Report that organizes a series of recommendations so that governments can implement

actions encouraging open education (EUROPEAN ECONOMIC COMMISSION, 2013). In 2015, in the World Education Forum, in South Korea, promoted by the United Nations for Education, Science and Culture (UNESCO), the Incheon Declaration was established, which determined strategies to develop a quality and inclusive education by 2030. In Brazil, among the government actions encouraging the democratization of knowledge, which collaborates towards strengthening the OER philosophy, we can point out some goals of the National Education Plan - PEN 2016-2020, whose objectives can be readily reachable with the use of OER (SANTOS, 2013).

Downes (2007) reports a series of advantages of OERs, among which are: universality, that is, the possibility of anyone to have access to information; a guaranteed dissemination of publications; greater visibility of research carried out and increased updating of ideas and knowledge, to the extent that OERs enable the use and alteration of their contents.

OERs also develop a multidisciplinary culture of exchange and collaboration

It is relevant to point out that OERs also develop a multidisciplinary culture of exchange and collaboration; constant, autonomous and self-regulated, independent and flexible learning. Nobre, Mallmann and Mendes (2015) explain that the pedagogical web-mediated by OER contributes to an increase in the field of education and collaborative productions.

Contrary to the advantages indicated, there are some inconveniences, for example, the concern about the quality of these resources. Considering that free availability enables anyone to recreate resources, the quality of the content can be compromised if someone who does not have the appropriate knowledge reworks it.

Also, studies carried out in various countries present inaccurate results about the real benefits of OER initiatives and need a more significant investigation to determine the exact impacts that the use of these resources has on the quality of education (HYLÉN et al., 2012).

According to Pretto (2012 apud PIRES, 2015), open educational resources enable professors and students to be more than just actors, but also authors of the process, because they help to create their resources and make them available.

Despite being a broadly debated topic that is relatively advanced regarding regulation, there are still many doubts and incorrect practices. In part, due to lack of knowledge by users, whether they are producers who wish to make content freely available but are unaware of the legal procedures. Alternatively, they are researchers who use content available without understanding that a resource that is on the web is not necessarily free for use or citations in derived works. Also the national regulations on authors' rights, in many cases, do not consider all the needs resulting from the globalized world.

Therefore, educators and students often violate copyright rules, by using content made available on the internet in their academic productions or lesson plans. This lack of awareness is one of the leading causes of these errors, which requires a

broadening of the debate so that the necessary information regarding the correct use of resources available on the internet reaches all users.

Another aspect that complicates the broadened OER philosophy, in Europe as well as in Brazil, is the low digital literacy of users, especially professors. Despite the increased access to the internet, studies reveal that the ability to do research and select the available content is still restricted, which requires the implementation of government policies that can invest in digital education. As Pretto (2012) claims, countries need to increase investments in public policies that encourage these initiatives and promote greater understanding together with educators.

Given this situation, in the context of the Master's Degree in E-learning Pedagogy, at the Universidade Aberta (UAb) of Portugal, in the curricular unit of Materials and Resources for E-learning, we decided to carry out a study to understand how professors of various teaching levels interact with resources available online. In this article, we discuss the results of this research, the primary investigative focus of which was Brazilian and Portuguese professors. We hope that this study can provide reflections regarding the use of online resources and resonate beyond the field of education, broadening to political and social spheres, converging on the definition of public policies dedicated to the universalization of access to education.

The study presented here was carried out in January and February of 2016, with the purpose of subsidizing the production of an open educational resource (video) that can serve as a learning instrument to guide professors and students in the conscientious use of the content available online.

2. Methodology

Based on the challenge of promoting an open and universal education, coherent with the current social context, in which information technologies strongly impact the way people learn and teach, this project investigated how professors and students relate to the content available in the online context and what the level of knowledge is regarding the rules for using these resources in educational activities.

The research was undertaken based on quantitative and qualitative methods of investigation, using data collection instruments such as applying an online questionnaire and carrying out interviews.

The target audience of this study was primarily Brazilian and Portuguese professors and students, from various levels of education, considering that the social networks of the researchers were used as tools for disseminating the questionnaire.

The online questionnaire, created using a research tool provided freely by Google Docs and posted on social networks Facebook, LinkedIn and Twitter, was available for response between January 20 and 29.

This survey was composed of 16 objective questions, with some of them requiring explanations. The objective of first six questions was to characterize the profile of the respondents.

Figure 1 - Questions to characterize the respondents

1- Sex:

- Female
- Male

2- Idade:

- 16 to 25 years of age
- 26 to 35 years of age
- 36 to 45 years of age
- 46 to 55 years of age
- 56 to 65 years of age
- More than 65 years of age

3- Country of residence: _____

4- In the educational environment, you are a:

- Professor
- Student

5(a)- As a professor, what levels do you teach: (professor)

- Primary/Basic Education
- Secondary Education/High School
- Undergraduate/Teaching Degree
- Specialization Course
- Master's Degree
- Doctorate Degree
- Professional courses

5(b) - As a student, are you at what level?

- Primary/Basic Education
- Secondary Education/High School
- Undergraduate/Teaching Degree
- Specialization Course
- Master's Degree
- Doctorate Degree
- Professional courses

6- Type of institution:

- Public
- Private

Source: Created by the authors.

The objective of questions 7 to 10 is to reveal the way in which the respondents relate to the content available in the online context.

Figure 2 - Questions about the relation of respondents to online content

7- How frequently do you use resources from the web in your educational activities?

- Always
- Frequently
- Rarely
- Never

8 (a)- What is the reason? (If the response is “never”)

- I do not trust the quality of the information available online.
- I am not digitally literate.
- I am afraid to use a resource that I do not have permission to use.
- I am afraid to be accused of plagiarism.
- Other: _____

If you do not use it, go to the acknowledgments. End of the questionnaire.
If you do use it, keep answering.

8 (b)- What types of resources do you use most?

- Academic texts and articles.
- PowerPoint/SlideShare
- Images and videos.
- Tools for managing and disseminating work.
- Other: _____

9- When you download resources from the web for use in your work, you:

- Just use them, without any specific procedure.
- Cite the source, including its address.
- Always search free use resources.
- Search for resources whose author released it for open use.

10- In your opinion, can any resource available on the web be used in educational activities?

- Yes. As long as with the citation of the source.
- Yes. As long as not used commercially.
- No. Because all of the resources available on the web have their rights reserved.
- No. Because all of the resources available on the web can have restrictions on their use.

Source: Created by the authors.

Questions 11 to 15 aim to identify the level of knowledge of the respondents regarding the intellectual property of web content regarding open education resources.

Figure 3 - Questions to survey knowledge on OERs

11- Do you know what open education resources are?

- I have never heard of them.
- I have heard of them, but I do not know what they mean.
- Yes, but I am not used to using them.
- Yes, I always use them in my activities.

12 - Have you ever heard of Creative Commons licenses?

- I have never heard of them.
- I have heard of them, but I do not know what they mean.
- Yes, but I have never used them.
- Yes, I always check the license of a resource before using it.
- Yes, I have used them to publish content that I shared on the web.

13 - Do you share resources (articles, texts, photos, videos, presentations, etc.) that you produce on the web?

- Always
- Frequently
- Rarely
- Never

If you answered "Never", go straight to question 16.

14- In these cases, were you clear about the permissions you were giving to users?

- No.
Explain: _____
- Yes.

15 – What type of license did you use and how did you make this clear in the resource?

Source: Created by the authors.

The last question aimed to reveal the opinion of the respondents about the open use of online resources in educational activities.

Figure 4 - Question about your opinion on the open use of resources from the web

16 - Are you against or in favor of resources available on the web being open for educational use?

- In favor
- Against

Explain: _____

Source: Created by the authors.

During the same period in which the questionnaire was made available on social networks, interviews were also carried out with four professors, two Portuguese and two Brazilian. We used a semi-structured interview, which included a list of questions to answer, but based on the professors' answers, other questions could be included to complement the ideas initially presented. The selection of the interviewees from the researchers' network based on the criterion of using web resources in their educational activities. Three of the four interviews were completed using web conferencing technology resources, and one was in person. Next, we present the list of questions used to carry out the interviews.

Figure 5 - List of interview questions for the professors

1. Do you use resources available on the internet to prepare your classes?
2. What precautions have you taken when using resources from the web?
3. What do you know about Open Educational Resources (OER)
4. Are you familiar with Creative Commons licenses?
5. Can you give an example of how you use OERs in your teaching practice?
6. What are the recommendations you would give someone who wants to use these resources in teaching activities?

Source: Created by the authors.

Based on the information collected through the questionnaires and the interviews, there was the completion of an exploratory analysis of the data, to understand the profile of the professors and students and the way they interact with the resources available online.

3. Results and discussion

The results of this research, as previously mentioned, contributed to the production of a video entitled "Good practices for using and sharing web resources in educational activities", which is an OER itself, made available online. To watch it, access the following website address <https://www.youtube.com/watch?v=-HrqTzPAZPg>. Next, the primary results collected from the online questionnaire and interviews.

The online questionnaire obtained 222 responses, with 64 (29%) completed by men and 158 (71%) completed by women. Here, we observed the predominance of females engaged in academic and educational activities. In the following table, you can see the overall profile of the respondents.

Table 1 - Profile of the respondents of the online questionnaire

Characteristic	Categories	Quantitative (%)
Age range	16 to 25 years of age	34.4
	26 to 35 years of age	19.9
	36 to 45 years of age	6.8
	46 to 55 years of age	27.6
	56 to 65 years of age	9.9
	More than 65 years of age	1.4
Country of origin	Brazil	64.4
	Portugal	34.2
	Others ²	1.4
Professor or student	Professors	60.6
	Students	39.4
Educational institution of origin	Private	59.7
	Public	40.3

Source: Created by the authors.

It is important to point out that, considering the context of this article, the professors' answers will be analyzed, which correspond to 60.6% of the total amount of respondents (134).

Regarding the educational levels in which the professors teach, the majority work in Primary/Basic Education (28.4%), followed by those who teach in Secondary Education/High School (22.4%). The respondents that teach in higher education, including undergraduate, specialization courses, masters or doctorate degrees, amounted to 20.9% of the respondents. It was important to emphasize the participation of professors who work in vocational education, corresponding to 11.9% of the respondents. It was also observed that 16.4% of the respondents claimed to teach, but did not specify the level of education. One may infer that they teach in more than one educational level or are professionals who perform other functions in the educational context, since, while the invitation was aimed at professors and students when made available on the social networks, the questionnaire did not prevent responses from professionals from other areas.

Regarding the frequency with which they use web resources in their educational activities, almost all of the 134 professors who answered the questionnaire always or frequently use them (90.45%). This aspect is relevant for this study since it explains how important content available online is considered to be for developing works and planning educational activities. Also, none of the Brazilian and Portuguese professors mentioned that they do not use online resources, which confirms once again the interest in and the importance of these resources in the current educational context.

Among the most frequently used resources available online are academic texts and articles, presentations, images and videos. None of the professors claimed to make use of online tools for creating or disseminating their work, which is in line with the results of research carried out in Europe (EUROPEAN ECONOMIC COMMISSION, 2013), as well as in Brazil (FREEMAN; BECKER; HALL, 2015), regarding the need to invest in actions that promote digital literacy among professors.

Regarding the precautions to take when downloading resources available on the web, merely 20% of the professors claim to use only resources whose author released them for open use. The other respondents use resources without any specific precaution or by just citing the source. Likewise, 10% of the professors always search for free resources, which allows inferring that many of them do not distinguish between the concepts “open resource” and “free resource”.

Regarding the perception of the unrestricted use of web resources in educational activities, 68% of the professors believe that they can use it freely. Of these professors, 71% believe that web content can be used without restriction, as long as they do not use it commercially and 29% believe that they can use them, even commercially, as long as citing the source. Of the 32% who answered that not just any web resource could be used in educational activities, 25% believe that the resources that are available online necessarily have their rights reserved and 75% believe that these resources may have restricted use. These data refer to a lack of knowledge of the limits of user’s licenses as well as a possible lack of identifying user’s rights for content available on the web.

Merely 20% of the professors claim to use only resources whose author released them for open use

About knowledge of OERs, almost half of the respondents (48.4%) are not familiar with them; or they have heard of them, but do not know what they mean. Of the professors who responded that they were familiar with OERs, almost a third of them claimed not to use them.

Specifically, regarding Creative Commons (CC) licenses, more than half of the professors have never heard of them or do not know what they mean (61%). According to the respondents who are familiar with CC, 14% have never used them, and 24.8% of the respondents know what they mean and always check the user’s licenses of the web resources before using them.

Regarding the availability of resources produced by them on the web, only 39% had the habit of frequently making their productions available on the internet. Most of the respondents (61%) have never shared their productions on the web or have done it rarely. This result reveals the apprehension or lack of knowledge about the conditions for disseminating their work in the online context.

Of the respondents who made their productions available on the web, only 33% made it clear to users how they can use the resource produced and 67% claimed not to make user permissions clear. The explanations varied widely, in general, related to a lack of awareness of the need for it or how to do it. Of these explanations, while there are people who use OERs and disseminate their work on the internet, a good part of them are not aware of the rules and the conditions inherent in OERs. They believe that since it will be published on the internet, there are no rules. This finding reinforces the importance of promoting specific training on this theme, whether for professors and students or for other people who use web materials to do their work or who wish to make their productions available in virtual environments.

The professors who claimed to make expressly state the types of use they attribute to their productions indicated a significant concern with plagiarism and with the unauthorized commercial use of their resources, claiming that, in general, they release their use for educational purposes, as long as it is not for commercial purposes and with the citation of the author.

The objective of the last question was to become familiar with the position of the respondents regarding opening resources available on the web. Only two professors took a stance against opening them. Their explanations were about the distrust of the quality of the resources available and a concern with the authors' rights. In general, those who positioned themselves in favor, reinforced their explanations, mentioning aspects such as the opportunity to exchange between different cultures, the democratization of access to knowledge and enriching educational activities.

As a complement to the data collected in the online questionnaires, the investigators completed four interviews with professors, to understand how they use online resources in their educational planning. All professors interviewed claimed to use web resources to develop their classes and showed concern with authors' rights. However, the level of knowledge about the correct procedures for their use varied among them. Two of the professors interviewed work in distance education (DE) and demonstrated greater command of the topic on OER. The professors who do not work in the DE context had little or no knowledge about the topic but still understood that not all of the resources available on the internet could be used freely. The statements collected in the interviews were important for reinforcing some data that appeared in the answers to the questionnaires, making it possible to conclude that most of the professors who participated in this research use web resources in their educational activities. Moreover, in general, they are concerned with issues related to authors' rights, but are still unfamiliar, at least in part, with the legal conditions to safeguard them when using and sharing web resources.

4. Final considerations

Based on the research carried out with professors on the use of Open Educational Resources in the educational context, this research concludes that there is a collaborative and favorable attitude towards the production of OERs. However, the lack of knowledge regarding existing licenses and the legislation that guarantees authors' rights have presented barriers to the expansion of this practice.

To increase these projects, it is essential to form a network of sustainability that enables access to the resources produced and made available online to everyone, protecting the necessary attribution to the authors, but enabling third parties to use, improve, reorganize and distribute these resources.

Moreover, individual initiatives, as reported in this article, collaborate towards accelerating this process, serve as an instrument for disseminating the concept of open education, and for the democratization of knowledge promoted by the OER movement, enabling a debate and spreading knowledge on the part of educators regarding the benefits of open educational practices.

Notes

¹Creative Commons (<https://creativecommons.org/>) is a nonprofit, North American organization. It provides licenses that enable sharing and using content made available on the internet through free legal instruments.

² One respondent from Spain, one from France and one from the Arab Emirates.

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