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L2 PROFESSORS' PERSPECTIVE ON THE CREATION AND USE OF OPEN EDUCATIONAL RESOURCES

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Abstract:
Open Educational Resources (OER) are teaching materials available online and for free and with as few limitations to access as possible. These materials offer a wide range of advantages in terms of availability, adaptability, and motivation. However, there are certain issues that must be addressed to ensure their widespread use, including funding, incentives, digital competence, or time and effort invested in their creation, among others. The purpose of this study is to survey L2 university professors to discover the main benefits and obstacles that this kind of materials poses for these professionals, being this group of subjects one that enjoys great autonomy to select class materials outside traditional textbooks. The ultimate goal of the study was to compare these findings with previous academic literature in order to observe if there have been any shifts in how OER are perceived. The findings reveal that while advantages traditionally associated with OER persist, there seems to be a shift regarding the obstacles faced by professionals in the field of education, with some disadvantages losing importance while new ones appear to be gaining prominence.

Keywords: open educational resources, teaching languages, materials for L2 teaching, professors' perspective, creating materials

1. Introduction

From simple handouts to review concepts covered in class to entire courses aimed at undergraduate students, Open Educational Resources (OER) and Virtual Learning Environments (VLE) are becoming increasingly common in all educational settings, and the teaching of languages is no exception to this global trend. All over the world, teachers, professors, tutors, and content creators are designing their own paper-based and digital materials to teach different subjects and are willing to share their work with the rest of the teaching community. A clear example of the popularity of this kind of resources is the platform Moodle, commonly used by numerous educational institutions as a

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repository of information, videos, notes, images, and even online exercises and quizzes, and that already counts with more 49 thousand courses, and 432 thousand users in 236 countries, as can be seen in https://stats.moodle.org/. It seems, therefore, undeniable that OER are gaining popularity among professionals in the field of education. However, there are some important considerations that are worth analyzing regarding this type of materials.

The aim of this paper is to explore and expand upon the work of authors such as Hylén (2006) or Tuomi (2006), and to analyze the use university professors teaching different languages as L2 make of their self-created materials. It also explores the main advantages professors find regarding OER, and the main deterrents they feel they need to overcome when creating and sharing their own materials.

The purpose of using this particular group of subjects for the study is that a) university professors seem to have more academic freedom than other professionals in the field of education, thus allowing them to choose the materials they consider more suitable for their lessons, and b) L2 instruction is very flexible in terms of topics to be covered and discussed in class, so professors have a wider set of possibilities to divert the lessons to whatever topic they or their students might consider more interesting, useful, or inspiring. In general, this group of professionals have very few limitations to using self-created materials if they wish to do so.

The following pages of this article are therefore devoted to understanding the concept of OER, trying to devise a definition that adapts to the reality and variety of these resources; analyzing the main advantages and disadvantages derived from using and creating OER; and observing them from the point of view of L2 university professors as OER creators to fully understand them from the point of view of those who create them.

2. Literature Review

2.1 Understanding and Defining OER

Open Educational Resources appeared as a response to the inefficiency of traditional education when it comes to knowledge dissemination. With the advent of technology, traditional teaching models were questioned and revised, and new ways of spreading knowledge became available online thanks to repositories, forums, or wikis, among others. This wealth of possibilities in terms of knowledge dissemination gave birth to OER. OER are, by definition, online resources available for free and that have as few restrictions as possible to access (Hylén, 2006; Yuan, MacNeil, & Kraan, 2008). Other characteristics of OER are that the final user, be it a teacher or student, should be able to not only use these resources, but to also make the modifications that they consider necessary to adapt these materials to their teaching and learning goals (Hylén, 2006). Tuomi (2005) describes this model as *fountains of goods*, by which the later modifications to the resource can improve its overall value.

However, in practice, the definition and delimitation of what OER is not so clear-cut. The concept of *open* implies that, theoretically speaking, all users across the world should have access to these resources for free. However, in practice, many institutions

offering this kind of materials require students to be enrolled in a course, which, in the majority of the cases, implies some sort of fee. However, it is questionable whether this defies the very nature of OER as, once enrolled, students do not need to face any extra payment to gain access, download, or use the materials; that is, the access to the materials is still free for registered users. Tuition is understood as covering the expenses derived from the education received, including teachers or professors, facilities, or equipment used by students, but not the materials themselves. To understand this fully, we can think of the case of classes for which a textbook is mandatory. Apart from tuition, students are expected to buy textbooks to follow the class. However, if the teacher or professor provides them with some extra material or handouts that they designed and uploaded online, students can have access to these without any further investment. Now, if we extrapolate this to courses where there is no textbook and all the class materials are provided by the teacher or professor (either online or in the form of handouts distributed in class), we can see how, despite the initial investment to enroll in the course, there is no further payment on the part of the students to gain access to the resources. However, whether these resources can be considered OER is still up for debate. As Downes (2007) says: "*It is not clear that resources which require some sort of payment by the user – whether that payment be subscription fees, contribution in kind, or even something simple, such as user registration, ought to be called 'open'*."

Another point of debate is the concept of *resources*. When talking about online educational resources, most people would think of something tangible, like a document they can download and read, a video of a lecture or a presentation they can watch, or online exercises they can do. As Tuomi (2006) says, the idea of resources is normally associated with *stock*. However, this is not always the case with OER.

> "*However, also the idea that a resource is a "stock" can, in some cases, be problematic. For example, many open source software development projects are supported by instant messaging channels, where the developers can ask for help and advice when they encounter a problem. These channels can be very important support mechanisms. Yet, there is no traditional "stock" associated with such dynamically generated services. In computer-supported learning environments, similar real-time support can be produced by peers, mentors, experts, or teachers, for example*." (Tuomi, 2006)

This poses new questions that need to be discussed by the teaching community. In instances where the acquisition of knowledge on the part of the students happens via instant messages or video conference, such as in the case of an online course where students have all the material available online but also some weekly or monthly online session with a teacher to ask questions or discuss some topics, can the teachers themselves, or the knowledge they transmit to the students, be considered an OER as well, as long as they are widely available online and for free? If so, how available do they need to be? Due to time constraints, people living in different time zones might have a much more limited access to this resource so, can we then claim that this resource is widely available?

As we can see, defining OER might not be as easy as it may seem from the outset. Resources can be of a very varied nature, and complete *openness* can, in some cases, seem like a utopian idea. A possible definition of OER that covers all the instances described above could be: Any kind of resource that implies some sort of exchange of information with educational purposes, that is available online with as few restrictions as possible, and at no extra cost for the final users. However, OER are still a relatively new concept and, with the rapid development of technology, this definition might have to be reconsidered in the near future.

2.2 General Advantages of OER

It is undeniable that OER offer a myriad of benefits to students, education professionals, institutions, and society in general.

One of the most obvious advantages derived from using OER is the fact that they are, as stated before, free. For students, that means having the possibility of using learning materials with no further investment. This is of especial relevance to democratize education as OER give low-income families and developing countries a possibility of having access to knowledge that they did not have before (Tuomi, 2006).

Another advantage related with the cost is their distribution. As OER are digitalized and available online, the cost of distributing materials decreases significantly (Tuomi, 2006). This also makes OER more environmentally friendly as there is no need to use printed books, thus saving paper, but also because there is no longer the need to transport physical books from manufacturers to final users, which implies reducing the carbon footprint of using learning materials.

As Hylén (2006) explains, wider availability and accessibility also imply faster dissemination of new ideas and knowledge, and therefore more people involved in technical and scientific development. This results in a society that can advance faster and in a safer way, having more resources to work with, and better ways of comparing and contrasting new ideas.

One of the premises on which OER rest is that their users should be allowed to modify and adapt them. Tuomi (2006) explains that this implies an advantage in terms of the final quality of the materials as "*qualitatively speaking, OER can potentially become better and better with each modification*".

Another advantage of using OER is that educators have the possibility of adding more variety to their lessons. Having access to a wide array of high-quality materials that are ready to use allows teachers at all levels of education to distance themselves from the traditional textbook and search for some other more convenient materials that can be more entertaining, practical, or clearer for their students. This might also promote trying new teaching methods and strategies, as teachers might come across different ways of explaining important concepts for their classes that they never thought of before, or more effective exercises to practice different skills in class that they were nor acquainted with. This can potentially result in a better educational system in which professionals are constantly updating their teaching skills and strategies. For students, this implies having

not only a wider set of resources, but also of different teaching methodologies that might be more suitable for their own learning styles and individual needs and interests.

Also, whether we are contemplating OER that educators find and download, or self-created materials designed by the teachers themselves that they share with their students, these materials can be almost tailor-made for the particular needs and interests of a particular group of students, which can result in lessons that are more motivating and interesting. From methodologies such as the Whole Language Learning (Richards y Rodgers, 2014) to theories regarding motivation in learning (Döryei, 1994), the emphasis on students' needs have been a cornerstone in the success of different educational programs. Downloaded or self-created OER offer teachers the possibility of adapting their lessons to the particular needs and interests of their students, which in turn results in a more motivating learning process.

Finally, educators and institutions can also benefit from increased reputation by creating and sharing their own materials (D'Antoni, 2009). By creating and sharing high-quality OER worldwide, institutions' reputation can grow exponentially, no longer being limited to only those students who attend face-to-face lessons.

In conclusion, from the greater variety, adaptability and availability of OER to environmental factors, it seems that these resources are already becoming a turning point in the way education is regarded. However, there are still some important considerations that need to be addressed, and that will be explored in the next section of this article.

2.3 General Concerns Regarding OER and Possible Solutions

Despite the undeniable benefits derived from using OER, there are some worries among the teaching community that should not be overlooked. The objective of analyzing these concerns, contrary to what it might seem, is not to criticize the use of OER or to discourage educators from including them in their lessons. On the contrary, the intention behind this list of possible obstacles is to open a debate and try to find a solution to the problems educators normally face when creating and using OER, all with the aim of making these resources as widely created and shared as possible.

As discussed before, one of the greatest advantages of OER was the fact that these resources are free to use. However, there are some monetary concerns derived from their use. As stated by Hylén (2006), some sort of funding might, in some cases, be necessary to start projects using OER, and, despite some initial intuitional backing, the sustainability of those projects in the long term can be compromised if funding ceases after a few years. It is important to take into account that the creation of OER might involve the use of specific hardware components or specialized software. If institutions are not willing to cover these, OER designers might feel discouraged to create this sort of materials. In order to overcome this obstacle, institutions need to create long-term programs of OER, ensuring that the costs of the creation, maintenance, and future modifications or updates to the materials are covered. Otherwise, the sustainability of OER projects can be seriously jeopardized.

Another concerning issue that could become a hindrance for the widespread use of OER is the lack of digital competence of professionals in the field of education. The

Common Digital Competence Framework for Teachers (CDCFT) or Marco de Referencia de la Competencia Digital Docente in Spanish, published by the Ministry of Education, Culture and Sport of the Spanish government, in its latest version of 2022, distinguishes 3 different stages in the development of digital competence, each of them divided into 2, much like the Common European Framework of Reference for Languages. The first stage of digital competence, or stage A, refers to a low level of digital competence, either because users only have some basic theoretical background on the use of digital resources, or because the experience they have with them is still very limited. The second stage, or stage B, implies that teachers can work with digital resources autonomously, and even in some cases offer help and support to others. Finally, the third stage, or stage C, is characterized by innovation. At this stage, teachers are able to create and innovate with digital resources to improve, for example, evaluation methods or design projects involving information technologies. When discussing the creation of digital materials, the CDCFT (2022) explains that teachers should be able to modify and adapt educational digital materials respecting the terms and conditions and intellectual property rights; create new digital contents either individually or in collaboration with others; assess the learning objectives, context, methodological approach and target audience when designing digital materials; and choose the necessary digital tools for the creation and modification of digital contents. The issue here is that teachers or professors might not have a high enough level of digital competence to feel comfortable looking for and evaluating OER, and probably even less so when it comes to creating their own resources. Also, knowing one's level of digital competence is not so common, as certifications are still not as widespread as it is the case of other disciplines as can be second language mastery. All this might contribute to teacher not feeling confident enough to contemplate the idea of using or creating OER for their lessons. In order to overcome this barrier, some institutions count among their staff with the figure of the digital facilitator[ii]. Among their multiple responsibilities, as can be seen on the webpage from the government of Castilla La-Mancha (Spain) (https://educamosclm.castillalamancha.es/portal/node/104), digital facilitators are in charge of implementing plans in order to improve teachers' level of digital competence, and collaborating in the process of obtaining certifications in digital competence. Thanks to these professionals, the problems associated with the lack of digital competence on the part of educators, or even the lack of awareness of one's own level of digital competence, could be easily solved provided that the recruitment of digital facilitators would spread to all levels of education worldwide.

Even at a relatively high level of digital competence, judging the quality of the materials available online can be an issue (Hylén, 2006), especially for those teachers who are still not very experienced in the use of OER. Hylén (2006) proposes different ways of making OER more trustworthy: using the institution's own reputation as a referent for the high quality of the materials they share, using peer review methods, or using a rating system by which users can assess the quality of a resource. This can help less experienced professionals select more suitable materials.

[ii] In Spanish, "dinamizador digital"

Time also seems to be a problem for teachers using or creating OER (Hylén, 2006). Judging from my own experience as a university professors teaching languages and an ardent fan of designing my own materials, I acknowledge that both creating and searching for OER that meet the specific needs of a subject or group of students can be a very time-consuming task. Even if you are simply making the necessary modifications to a resource, this sometimes takes a long time if you want to adapt it to a high standard. In my field, finding some resources that are useful means looking for materials that are level-appropriate for my students, that deal with the topics being covered in class as part of the course contents, and that help students to practice the necessary skills that they need to master, all at the same time. Finding, creating, or adapting materials so that they fulfill all these requirements is sometimes a daunting task, so it would not be surprising if teachers opted for sticking to the use of a textbook as a general guide to their subjects. A possible solution to help teachers save time when looking for suitable OER would be for institutions to have well-indexed online repositories with advanced search features that can allow educators to easily find the materials they need in terms of topic, level, or skills, among others. Even though these repositories will be available worldwide, having them centralized around one particular institution, namely a university, can be of help as professors would already know that the resources they are browsing have been pre-approved by the institution they work for, and are more likely to meet the needs of the classes they need to teach at this institution.

The time and effort invested in the design of OER seems to be related to another issue mentioned by Hylén (2006), the lack of incentives. As stated before, the creation of OER requires not only a certain degree of digital competence but also time that is normally allotted outside the working schedule. Not having any kind of incentive for their dedication to these projects might be discouraging for teachers in the long term, who might consider that the effort they put into the creation of these materials is not credited for. This could be easily solved if institutions offered some kind of reward for the creation of high-quality digital content that could be uploaded and shared with the rest of the teaching community. Incentives could be of varied nature, from higher salaries to public recognition, fewer credits to teach, or days off.

A final challenge regarding OER, as stated by Hylén (2006) concerns retaining some rights over one's creations available online, as there seems to be a general lack of awareness of copyright issues, and academics appear to be hesitant to make their work available online under the public domain without any control over it. A way to overcome this obstacle can be by means of Creative Commons licenses (https://creativecommons.org/), which provide OER creators with a way of sharing their work with some rights reserved to the author. However, when working with content available online, the boundaries of what is allowed or not are sometimes blurred. Even though the author of some online content may give some editing rights to other users, it is virtually impossible to know what use others will make of their creation, which might cause educators to balk when it comes to sharing their resources online. One of the instances of unauthorized use of OER can be found on the webpage https://wuolah.com/, where registered users can upload any material and make a profit from it based on the

number of downloads. Even with Creative Commons licenses, full control over one's creation online is impossible, and concerns over other internet users making a profit out of some creation that was intended to be offered for free, such as it is the case of OER, are growing.

In conclusion, OER have the potential to become an effective tool to democratize education and disseminate knowledge, thus improving access to education worldwide. However, there are still a number of concerns regarding these materials that must be addressed in order to ensure their widespread use and implementation, including the implementation of quality control mechanisms, financial and technical support for their development and long term sustainability, incentives for creators, and the lack of digital competences of education professionals. Institutions and governments should work collaboratively to overcome these issues in order to further promote the use of these materials.

3. The study: L2 professors' perspective on the creation and use of OER

3.1 Objective of the Study

According to Hylén (2006), limited information is currently available regarding the original creators of Open Educational Resources, especially at a more local scale. Therefore, the main objective of this study was to gain deeper insight into the use and creation of OER from the standpoint of their creators and analyze if there has been a shift in terms of the advantages and obstacles traditionally associated with these resources, thus adding more evidence to this discussion.

3.2 The Subjects

For the purpose of this study, a survey was distributed to 32 university professors who teach various languages as L2 in Spain, including English, French, German, Italian, and Arabic (with 24 respondents who completed the questionnaire). The rationale behind using this particular group of subjects was motivated by the fact that university professors usually have more academic freedom when teaching and are, therefore, more prone to diverting from traditional textbooks and searching for or creating other materials that could be more suitable for the particular needs of their classes or students. Additionally, L2 instruction is typically very flexible in terms of topics that can be covered in class. As long as students are exposed to the target language, the contents are level-appropriate, and there is a clear learning objective, the topics and format of the materials used to that end can have a wide range of formats. Therefore, L2 professors face minimal limitations when selecting materials for their lessons and are therefore more likely to look for or create them, which makes then an ideal group of subjects to analyze the advantages and obstacles associated with using and creating OER.

3.3 The Survey

The survey implemented for this study took a qualitative approach and aimed to examine the frequency of use of self-created material, the main advantages L2 professors observed

regarding the use of these resources, and the obstacles the feel they need to overcome in this process. Once the data obtained from the surveys is analyzed, final conclusions will be drawn by contrasting this information with the advantages and obstacles regarding the use and creation of OER discussed in previous sections of this paper. The ultimate objective of this analysis is to gain deeper insight into OER from their origin.

The survey was completely anonymous, and no personal or identifiable information was collected. It was designed and administered online using the platform Google Forms.

3.4 Results and Discussion

The first section of the survey addressed the question of how often L2 professors used their own materials in their lessons. As shown in Table 1, all professors claim to use some form of self-created materials in their language classes, with a majority of them (58.3%) making frequent use of these resources. However, it is remarkable that only a small percentage (4.2%) of those who completed the survey use self-created materials exclusively, indicating that there seems to be some reluctance to abandoning the use of traditional textbooks. However, we must acknowledge the fact that this could be due to institutional constraints or subject requirements and not necessarily because of the professors' choice. Nevertheless, there seems to be a clear preference towards the use of self-created materials in language classes, at least to some extent.

Table 1: Frequency of use of materials own materials

Requency of use	**Percentage of respondents (%)**
Never	0%
Only sporadically, as a complement to the textbook	37.5%
Often, a big part of my lessons revolves around my own materials	58.3%
All my lessons are taught using my own materials	4.2%

The second section of the survey explored the main advantages L2 professors observe in the use of self-created materials. In this part, professors were asked to select from a list of benefits the ones they consider applicable to their particular cases. The option of adding other advantages that might not have been previously contemplated was also available. As shown in Table 2, the main advantages observed by this group of subjects were the adaptability of self-created materials to their particular teaching style or methodology (87.5%), better focus on specific concepts or tasks (70.8%), and increased motivation among students (66.7%). On the other side of the spectrum, personal satisfaction derived from creating their own materials, or the fact that students do not need to pay for them, scored relatively low, indicating that these are not important advantages for the subjects of this study.

Table 2: Advantages of using professors' own materials

Advantages of using own materials	**Percentage of respondents (%)**
I can adapt them to my own teaching style/methodology	87.5%
I can focus on specific concepts/tasks better	70.8%
I can motivate my students more	66.7%
I get personal satisfaction when I create my own materials	37.5%
My students do not need to pay for the amterials	4.2%
I don't find any particular advantage	0%
I don't use my own materials	0%
Others	0%

The last section of the survey seeks to analyze the main obstacles L2 professors feel they need to overcome regarding the use of their own self-created materials. As in the previous section, professors were given a list of drawbacks typically associated with the use of these materials and were asked to select the ones that were applicable to their particular cases. The option of adding other disadvantages that might not have been contemplated in the survey was also implemented. As shown in Table 3, the main obstacle encountered by these professionals is the amount of time invested in the creation of materials, with 70.8% of the respondents considering this a disadvantage. Other obstacles that L2 professors face include worries about the quality of self-created materials, concerns about the use others could make of their materials, and the lack of incentives, quoted by 16.7% of the surveyed, indicating that these disadvantages are less prominent. Similarly, other obstacles discussed before, such as the case of low digital competence or lack of necessary equipment, also scored very low on the list, with only 8% and 4% of the respondents, respectively, considering these a problem. However, some of the subjects also mentioned other hindrances that had not been contemplated before, such as concerns about students not valuing the time and effort invested in the creation of materials and worries about students not considering these materials relevant for the development of the subject. Finally, the lack of institutional funding does not seem to be an issue, according to the respondents.

Table 3: Factors that hinder professors' use of their own materials

Obstacles encountered when using/creating own materials	**Percentage of respondents (%)**
It takes too much time	70.8%
I worry that my materials might not be good enough	16.7%
I worry about others using my materials outside my class	16.7%
There are no incentives/rewards	16.7%
I lack the necessary skills to create my own materials	8%
I don't have the necessary equipment to create my own materials	4%
I don't have the necessary institutional funding to create my own materials	0%
I don't use my own materials	0%
Others: Students don't value the time and effort I put into creating materials	4%
Others: Students might consider that my materials don't fall within the scope of the class	4%

Comparing these results with the ones shown in existing academic literature and explored in previous sections of this paper, it can be observed that, while the main advantages traditionally associated with the creation and use of self-created materials are still perceived as such, including their adaptability to different teaching and learning styles, their motivational power, and the possibility to better focus on specific concepts; there seems to be a shift when analyzing the obstacles. Compared to previous research studies, while some of the disadvantages were still considered as such, as in the case of the necessary time and effort invested, worries about the quality of the materials, lack of incentives, low levels of digital competence, or lack of institutional funding received significantly less attention. However, new obstacles not contemplated before seem to be emerging, specifically those related to students' perception of the materials in question. Further research should, therefore, be conducted to understand if these factors are widespread deterrents to the creation of OER among the teaching community.

4. Conclusion

Open Educational Resources have the potential to revolutionize the field of education thanks to the wide variety of advantages that they offer to the teaching community, including their widespread access, their cost-free nature, their adaptability to different teaching and learning styles, or their motivational power, among others. However, there are also a number of concerns associated with OED that have been documented in academic literature. Those include insufficient funding or access to the necessary equipment for their creation, low levels of digital competence among professionals in the field of education, lack of incentives for creators, the amount of time and effort invested, or worries about unauthorized use of these materials. All these could be hindering the widespread use of OER.

As mentioned in previous sections of this paper, there is a lack of information regarding OER from the point of view of their creators. To shed some light on this matter, this study examined the opinions of L2 university professors to understand, from their perspective, what the main advantages and obstacles were and compare those results with previous academic literature. This group of professionals enjoy great autonomy when it comes to selecting materials for their lessons, making them an ideal cohort of subjects for this study as they are more likely to use or create OER. The results show that while most advantages of OER still persist, especially with regard to adaptability, focus, and motivation, there seems to be a shift regarding the disadvantages. Although some of the hindrances faced by L2 professors regarding the time and effort put into creating their own materials are still considered so, others seem to be losing importance, namely the lack of funding, incentives or equipment, and the low levels of digital competence. However, new obstacles were found in this study, including students' perspectives regarding the validity of said materials or the value they place on the effort made by the person creating the materials.

In conclusion, OER offer a great set of advantages to the education community, but there are some issues that need to be addressed to encourage their widespread use.

Institutions and governments should work in collaboration to ensure that these issues are solved.

Conflict of Interest Statement

The author declares no conflicts of interest.

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