Ownership and Agency in the adoption of Open Educational Resources

Virginia Rodés-Paragarino[1] y Adriana Gewerc-Barujel[2]

[1]Núcleo Interdisciplinario sobre Recursos Educativos Abiertos y Accesibles, Universidad de la República, J. E. Rodó 1843, 11200, Montevideo, Uruguay
[2]Departamento de Pedagogía y Didáctica, Facultad de Ciencias de la Educación, Universidad de Santiago de Compostela, Rúa Xosé Mª Suárez Núñez, s/n (Campus Vida), 15782, Santiago de Compostela, España.

Abstract. The widespread focus on ownership in the field of OER refers to the ownership of copyright, and the way to open sharing and publishing, as an intrinsic and defining characteristic. Based on a Grounded Theory study, along with Biographical Methods and Digital Ethnography, the article proposes moving from the perspective of OER as open content sharing, to a broader conceptualization that encompasses emotional ownership, ownership ~~in~~ of curriculum change, and teachers' agency in the development of the curriculum as key factors for OER adoption.

Keywords: Open Educational Resources, Ownership, Emotional Ownership, Agency, Teachers' Agency, Curriculum Change.

1 Introduction

In the Open Educational Resources (OER) field, issues related to ownership, especially intellectual property and copyright, have been one of the most addressed aspects, becoming an essential part of their definition. Currently, "Open Educational Resources (OER) are learning, teaching and research materials in any format and medium, which reside in the public domain or which are under copyright, having been released under an open license. They allow no-cost access, reuse, repurpose, adaptation and redistribution by others. Open license refers to a license that respects the intellectual property rights of the copyright owner and provides permissions granting the public the rights to access, reuse, repurpose, adapt and redistribute educational materials" [1].

Considering the above, ownership is an intrinsic area in the study of OER, although not sufficiently explored from the perspective of teachers.

This article addresses knowledge and perceptions about ownership, and its relationship with agency, as key factors involved in the adoption of OER by university teachers.

Based on a doctoral study [2], aimed at analyzing the dimensions of the adoption of OER by university teachers, this study falls within the interpretive paradigm, from a perspective of social co-construction of technological systems. This approach

implies the analysis of the conditions that maintain OER in a marginal position in the selection of educational resources and in educational practices, from a double perspective on agency and structure, the teaching staff and the university institution, from within the studied phenomenon.

A qualitative methodology based on Grounded Theory was developed, along with Biographical Method and Digital Ethnography, on twelve subjects, chosen from among teachers from three public universities in three Latin American countries (Uruguay, Costa Rica and Venezuela). As a result, a theoretical conceptual model of OER adoption has been developed from a critical perspective, which: 1) places teachers as the most important agents in OER adoption in the context of Higher Education, within the framework of a reflective and situated practice, highlighting the existing connections between their personal and professional identities as a relevant factor; 2) places the adoption of OER within the framework of the curriculum, understood not only as content, but as processes, practices and contexts that exert influence and power, both at the level of the hidden curriculum and the manifesto; 3) contributes to transcending the post-colonial perspective of the universality of OER, facing the challenges for their critical appropriation in diverse contexts.

This model allows moving from the traditional perspective of OER located in the field of intellectual property on content and its open sharing, towards a broader conceptualization that encompasses the ownership of teachers over the curriculum, and their conceptualization as agents in the development of the curriculum.

The article is structured as follows: in section 2 we introduce the theoretical relationship between OER and the concepts of ownership and agency. Section 3 presents the methodological approach, methods and design, followed by the presentation of results and discussion in section 4; finally, we present the conclusions in section 5.

2 OER ownership and agency

The widespread focus on ownership in the field of OER as an intrinsic and defining characteristic, refers to the ownership of copyright, and the way to open sharing.

From a traditional perspective on authorship, incentives are given in the form of intellectual property rights, copyrights and patents, giving creators ownership and control over their work, so that the author has financial incentives to rewrite [3].

By means of OER, on the contrary, knowledge can be freely accessed by people from all over the world, blurring traditional notions of intellectual property, promoting social transformation through values based on open access to knowledge [3]. The way of conceiving ownership constitutes a differential perspective in the way of producing, sharing and using works within the framework of the knowledge economy. This is crossed by production trends based on common goods, the basis of open licensing, according to which there is not a single person who owns the resource in the traditional sense of ownership [4].

Openness has been closely associated with permissive licensing of digital intellectual property, in order to support the reuse of OER, although it should go

further [5]. Openness should be understood rather as a means than as an end, within the framework of a range of practices grouped under the concept of open education.

This perspective connects OER to the particularities of its development scenario, which is the educational institution. In this sense, the way of conceiving OER focused on access and reuse of content, represented in the 4R model (permission to Revise, Reuse, Remix, Redistribute) [6], then 5R (Retain) [7] lacks a broader perspective, situated in the creation processes, which, as we will see, turns out to be key in the adoption of OER.

Another important aspect in the area of reuse, is the concept of re-appropriation, whereby teachers develop changes that allow the OER to be adapted in such a way as to "make it their own" [8], with "inspiration" being one of the practices identified [9] [10], which challenges the traditional model and places the concept of teacher ownership on OER as a key factor.

From this perspective, it highlights the importance of collaborative models in the development of ownership over OER [11]. The traditional top-down frameworks [12] lead to frustration and lack of ownership in OER adoption. The collaborative and development-oriented nature of teams in the educational environment leads to an increase in ownership, transparency and the distribution of responsibilities among the main stakeholders, teachers, resulting in higher success rates in adoption.

The creation of OER is largely voluntary and its motivation is altruistic [13]. Although the collaborative vision can be considered as opposed to the altruistic motivation to create and share OER, personal emotional ownership strengthens the community and could contribute to opening the practice of teaching in higher education [14].

Emotional ownership is a key to success and to overcome barriers in OER adoption [15]. In this approach, the concept of emotional ownership is central, and conceived as "the degree that individuals or groups perceive that knowledge or resources belong to them", addressing the question of the personal relationship that is established in the processes of creation or innovation, whether individual or collective, which is very different from the relationship that is established with an object that is used. However, emotional ownership is not something that is inherently owned, but rather needs to be developed in the various stages of production and publication of OER [15].

However, emotional ownership can become either a facilitator or a barrier to knowledge exchange [16]. Sharing, an intrinsic activity of OER, makes it essential to know the factors that lead to sharing. The context establishes the conditions on which the teachers consider their participation, in a rational or intuitive way. The expected level of openness and transparency is another critical aspect of openness, determined by trust, comfort, and familiarity, particularly for sharing as yet incomplete materials. In collaborative processes for resource development, the behavior related to the commitment to share is not constant or linear, being determined by intrinsic and extrinsic factors, and subject to change over time. Therefore, shared representations of ownership are really possible.

On the other hand, self-efficacy confidence is important related to perceptions about OER [17] and it is central in decision-making about open sharing, since fear of exposure plays a role in considering the work as an extension of their own image as an academic professional. This leads to the important issue of the development of the teaching agency.

The critical perspective about teacher ownership of curriculum change [18] should be a focus on the open education movement. Teachers' ownership of curricular change is delimited and anchored in their genuine participation and authority to speak on curricular issues in the local context, key to the implementation of educational innovation.

However, this ability to develop their own voice and actively participate as agents of curriculum transformation is something to be built. Agency is not a property, it is not owned, it is exercised and achieved [19], [20]. Agency is both enabled and restricted by the social and material environment [19], and its achievement "must be understood as the configuration of influences from the past, orientations towards the future and commitment to the present" and the way "how this interaction varies within different structural contexts of action" [21].

Teacher professional development and curriculum are closely connected to the creative unfolding around the development of teaching resources. The empowerment of teachers as agents for the creation of teaching resources, offers opportunities to position themselves as agents of innovation and curriculum development [22]. This perspective, which places the teacher as a fundamental agent in the generation of contextualized teaching resources, from reflective practice, recovers the perspective about the teacher's professional development based on the production of educational resources [23], [24], [22], [25] - [27]. A perspective that surpasses, in addition, the approach based only on the technical aspects of the design and planning of educational resources.

Educational resources, and their paradigm, the textbook, pedagogically structures the culture selected in the curriculum [25]. Far from having been modified, the power of this structuring stands out, throughout more than two decades of the emergence of digital technology in education [28].

The creation of educational resources begins to emerge as a relevant area, driven by the potential that technology offers to support collaborative authoring processes [27]. The potential of this perspective, compared to the editorialized model of production of teaching resources, has multiple impacts on the traditional configuration of the ecosystem of university study materials [29]. In particular, it not only positively impacts the agency of teachers as curriculum developers and their professional development, but it also contributes to the generation of scenarios that favor access to education.

The creation of educational resources is generally associated with publishers, and more specifically with textbooks and other printed materials. Its commercial nature, being a regulated commodity, determines that the production conditions depend on the market. The publishers end up being responsible for shaping the actual curriculum, even when they are outside the educational institutions. This panorama generates in teachers a distance in decision-making, lack of autonomy and de-professionalization [22], [27].

It is necessary to identify the way in which OER philosophy can be integrated into this conception, which places teachers as agents of curriculum development. This integration, we maintain, implies a very intense rupture in two major fields of educational culture: a) book culture, as a resource defined externally to the educational organization and dominated by agents who determine what is taught and how, based on the pedagogical presentation of the culture selected in the curriculum;

b) the culture centered in the classroom as a closed space, and the teaching work as a task that is developed in solitude. The key is the creation and reuse of educational resources from the collaborative work of teaching teams.

Several studies place the academic agency, and its development context, as fundamental dimensions in relation to the adoption of OER in the context of higher education. University teachers are identified as the main agent in the decision-making process in the adoption of OERs [30] - [33] and the relevance of the link between teaching practice and OERs is highlighted, as well as the incidence of aspects such as professional development and social factors in the educational field [34] in the OER adoption processes. Research on teaching work at the university, the construction of the identity of the teaching staff and their professional development - an aspect of relevance in the development of the teaching agency - have revealed the situation of devaluation of teaching compared to research, and how this has influenced the training and professional development of teachers and the production of educational resources [27] - [29].

The adoption of OER in an institution is mediated by the existing policy structure, its predominant social culture and the academic agency itself, three components of the institutional culture [38]. The aforementioned study allows us to understand how structure, culture and agency interact. One factor in the adoption of OER is the motivation or will of the teachers. If they enjoy the access, permission, knowledge, capacity and availability necessary to participate in the OER activity, then volition becomes a key factor in adoption. The individual will is potentially shaped by the social context and institutional structures. In institutions where teachers are the potential agents of activity related to OER, the elements that shape their individual volition are personal, idiosyncratic, internal beliefs and practices that have to do with whether or not they can adopt OER. These beliefs and practices include teaching style, educational philosophy, level of self-esteem about own educational resources, level of concern about the misuse or misinterpretation of the own work, etc. These internal variables such as fears, worries and desires arise from teachers themselves.

It is therefore appropriate to place the analysis of the adoption of OER in the context of the practices of elaboration of digital educational resources by university teachers. This allows us to identify the micro-innovations that lead, or can potentially lead, to adopting the OER model for the open publication of these productions, and to observe the creation of educational resources from a perspective situated in the teachers, their agency, and their creation and sharing practices for the development of ownership over OER.

3 Material and methods

Part of the methods of this study were previously published [39] [9], so this section presents a summary of them, adding new components.

3.1 Purpose of the study

The purpose of the study is to analyze the dimensions of the adoption of OER by university teachers. The research questions that guided the study were: what factors influence the adoption of OER among teachers in Latin American universities? (RQ1); how is the adoption of OER embedded in teaching practices? (RQ2); what subjective, contextual, institutional, cultural, curricular, didactic factors (among others) intervene for the use, or not, of repositories and OER? (RQ3); which and how are the practices and modalities of creation, publication, sharing and reuse of educational resources by university teachers? (RQ4); what are the different types of use of Repositories of OER (ROER) that are made by university teachers? (RQ5); how can these factors be addressed to improve the use and reuse of OER and ROER in Latin American universities? (RQ6).

3.2 Methods & Instruments

The study followed a qualitative methodological approach, which is based on the principles of reflexivity, openness, recursion, and flexibility [40], and it is supported by a particular method in the field of qualitative research, the Grounded Theory [40].

According to the Grounded Theory, what we call theory is founded on the interplay with the data systematically collected through theoretical sampling and analyzed by making constant comparisons, interrogating by means of theoretically oriented questions, with theoretical coding (open, axial and selective). From that point on, the theory develops in permanent articulation with data analysis until it reaches the theoretical saturation of the categories resulting from the analysis [40].

Favoring methodological complementarity, this research also integrates Ethnographic methods, as is the case of the biographical method [42] [42] and digital ethnography [44]. It is situated in a particular organizational context, the university, and in a specific territory, Latin America. The qualitative design elaborated was oriented to know the processes of creation, validation, publication and distribution of educational resources, in particular the practices of digitization and opening of resources in the framework of these processes.

3.3 Participants

The research was developed taking the Latin American Community of Learning Technology (LACLO) as the field of study. The selection of this community is based on the understanding that participants are close enough to the creation and publication of digital educational resources to have the relevant experience within the subject of study. Although they may not necessarily be experts, they can be identified as representatives of the population of university teachers who create, use, and share digital educational resources. A longitudinal quantitative study was conducted on the database[39], to characterize the population by pointing out some of its main demographic characteristics. The variables number, country, gender, discipline, and

institution were analyzed. The population studied included 283 individuals. Of the total, 120 were men (42%) and 163 women (58%).

A theoretical sampling was conducted, aiming at comparing events, incidents, or situations, to determine how a category can differ in terms of its properties and dimensions. The participants were purposefully selected to maximize the differences between comparison groups, established by country, institution, disciplines, gender, and communities or work teams.

Therefore, the dataset was composed as follows: a country selected according to a degree of participation classification (high, medium, low). We selected Venezuela, Costa Rica, and Uruguay to have good territorial coverage of the Caribbean and the northern and southern regions of LATAM. Central University of Venezuela (UCV), State Distance University of Costa Rica (UNED), and University of the Republic (UDELAR), respectively. They are three public universities, with different characteristics regarding teaching modalities (distance education at UNED, mixed education at UCV, and face-to-face education at UDELAR). Twelve individuals were selected, four per university, considering variability regarding gender and areas of knowledge. From UCV, Venezuela, two men (V3 and V4) and two women (V1 and V2) were selected, who are teachers in the area of science and technology (computer science, physics, and chemistry); from UNED, Costa Rica, all were female teachers (CR1, CR2, CR3, and CR4), one from the area of science and technology (computer science) and three from the social and arts fields (education, tourism, and design); from UDELAR, Uruguay, we selected three women (U2, U3, and U4) and one man (U1), a lecturer from the science and technology area (biology), two from the social and arts field (economics, communication), and one from healthcare (nursing).

Based on the background information, the objectives of the present study and its particular methodological approach, the design of two data collection instruments was chosen:

i. a focused thematic open interview aimed at identifying attitudes and practices regarding OER;

ii. a biographical interview aimed at revealing personal and contextual information, linked to the professional careers of teachers and the characteristics of educational centers, their culture, organization, among other aspects.

The theoretical sampling led the interview process, starting from the selection of the most relevant contents for the understanding of the research problem from the chosen perspective, allowing the gradual construction of the corpus of data. It articulated moments of application of data collection instruments with moments of analysis based on open coding.

As a result of the application of data collection instruments based on theoretical sampling, more than 24 hours of recording were obtained, corresponding to between 2 and 3 instances of interview with each subject, lasting between 40 minutes and 1 h 20 each.

3.4 Analysis methods

To perform the analysis, we transcribed the interviews and then studied the resulting texts with the qualitative data analysis software Maxqda.

The first stage of the analysis was coding the data, an analytical process through which data is fragmented, conceptualized, and integrated as theory through successive comparison processes (Strauss & Corbin, 1990). The analysis led to developing 500 codes and identifying 3547 text segments from the interviews that were identified through open coding, focusing on the main idea and not on pre-established dimensions.

In the framework of the Grounded Theory, the process articulates this microanalysis [45] to generate initial categories (with their properties and dimensions) and to suggest the relationships between them; a combination between open and axial coding.

The findings led to the identification of four main categories as dimensions of the adoption of OER by university teachers in universities in Latin America: 1) Construction of Identity Teaching Professional (RQ2 and RQ3); 2) Practices and Transformations in the Curriculum (RQ2 and RQ3); 3) Creation, Use and Opening of Digital Educational Resources (RQ2, RQ3 and RQ4); and 4) Social Representations regarding the ROER (RQ2, RQ5 and RQ6) [2].

The main results related to the object of this article are presented below, addressing the articulation of OER adoption with the concepts of ownership and agency, present in the four dimensions mentioned above.

4 Results and Discussion

4.1 Policies, institutional culture and professional identity of teachers

The results of our study show the lack of national or institutional policies that promote the development and adoption of OER. Although implementations are mentioned, these are individual and contradictory initiatives, and do not appear to be established or standardized (UDELAR and UCV cases). The case of UNED is slightly different, as the teachers interviewed mention the existence of a national policy of open access repositories, with which the institutional policy is being aligned, although neither in a homogeneous way for the various institutional repositories that the university has, nor specifically geared towards OER.

Recent studies show that policies can act as a motivating factor depending on the type of institutional culture where this activity is integrated [31]. The institutional components in the cases analyzed correspond to a particular university model, with specific Latin American traditions [46]. These determine, for example, the high level of autonomy between the various faculties within the universities, especially in the case of UCV and UDELAR. In the case of UNED, the institutional culture is different, as a result of its organizational model determined by its distance learning

modality, and a certain rigidity in its curriculum, while enjoying high articulation with the higher education system at the national level.

There are also no references to specific financing policies for the production of OER. However, some relevant opinions of interviewees about OER ownership, state that the open sharing of educational resources would be part of what is already paid in their salary, so it would not be appropriate to expect royalties for copyright, in a frank attitude towards open publishing.

The particularities of the altruistic teaching professional identity intervene, combined with characteristics of the mission of the Latin American universities, oriented to social development [46]. This finding is really significant, considering the differences with studies, where economic incentives are central to adoption factors. It is here that the importance of institutional culture emerges, together with its impacts on the formation of professional teaching identities, a key component of the agency.

4.2 Teaching agency and curriculum development

The interviewees assert that, since there are no institutional policies for the creation of educational resources in their respective universities, this depends on the teacher's initiative and willingness. We saw in Section 2 that several studies identify university teachers as the main agents in the decision-making process of OER adoption [30] - [33] and that some find this determined by the prevailing institutional culture [31]. So tensions related to the practice of educators and OER, teachers' professional development and social factors, also play a part [34].

Among the problems that centrality in the teaching agency entails, the results stand out: the invisibility and non-remuneration of the hours dedicated to content creation; the non-centrality in which the institution places teaching; the valuation of research production to the detriment of products derived from teaching; and the absence of mentions in the explicit curriculum to connect teaching with the development of educational resources. This aspect of the lack of formal institutional recognition of the creation of OER is consistent with previous studies [47].

However, it is important to highlight the role of teachers in the development of teaching resources as a fundamental component in their empowerment in curriculum development and teacher professional development [22]. In previous sections, we highlighted that teaching professional development and curriculum are closely connected to the creative unfolding around the development of teaching resources. The empowerment of teachers as agents for the creation of teaching resources, offers opportunities for teachers to position themselves as agents of innovation, reflection and curriculum development [22].

This perspective, present in our results, places the teaching professional as an agent in the creation of educational resources for the contextualized creation of content, transforming teaching through reflective practice. The agency that we visualized in our study regarding the role of teachers in the adoption of OER in universities, is a dimension of absolute relevance that must be considered due to the impacts of this finding, consistent with previous approaches on professional development of teachers and creation of educational resources [22] - [27].

4.3 Organizational components: collaboration, groups, communities, networks

Policies, or their absence, can, at the same time, lead to changes in organizational and individual practice [34]. It is possible to interpret the agency of teachers in light of this aspect.

The recurring presence of work teams that allow and favor the development of educational resources stands out in the results of our study. These teams present organizational structures that account for three different models, consistent with the institutional culture and curriculum structure surveyed: 1) located in the university faculties and services, coordinated by a central team, which make up a network (UDELAR); 2) centralized, with a specialized department made up of departments, with a hierarchical and institutionalized structure (UNED); 3) teaching chairs articulated by an advisor who acts as leader, the chairs are not linked to each other, but to the leader and the strategies are not institutional (UCV).

The organizational transformation component has been little studied in the case of the adoption of OER, in terms of influence, structure and work teams [48] - [51], and we have seen the relevance of collaborative work and teams in the development of emotional property and teaching agency [11], [15], [16].

We understand that the component of creation of communities, in our study, contributes with significant aspects to the analysis of the OER creation process, which is not carried out alone, but through pedagogical support and advisory teams, innovation networks, and academic units (as chairs and departments, for example), pre-existing in institutions. These organizational structures sustain and enhance the capacities for the creation and dissemination of innovations, which we have identified in previous works [52] - [54].

Based on these results, we propose to integrate the collaborative component provided by the groups of different order, into the analysis of OER adoption strategies. This component operates as an interface between the teacher and institutional policy. We believe this is an interesting finding from our research that should be incorporated into frameworks such as [31], [38].

It is interesting to recover the cultural perspective implied by group work, in some cultures, teamwork and group work are the norm, while in other cultures, whether social, institutional or disciplinary, these are interpreted as academic dishonesty [55]. This should be considered in relation to the development of intellectual property and emotional ownership.

Each one of the studied teams has a member who assumes the leadership and whom the other members recognize as a source of initiatives and reference, in all cases this role coincides with coordination positions. In the case of UCV, the incorporation of students in all the OER creation processes stands out.

The issue of teacher roles and leadership in situations of curriculum change has been analyzed in its connection with the development of teacher professional identity [56], and it is possible to transfer it to the field of OER, from the micro perspective of work teams, groups and creative communities. This component seems to indicate another area of analysis in the field of OER, the one that biographical and narrative perspectives can help to analyze, as in our study. Adoption frameworks focus on the leadership of the so-called "stakeholders" and "advocators", and less on the influence that peers can exert at the micro level of each group and community of creation. It is

also interesting to interpret these processes in the light of the approach of the so-called professional communities of practice[57] as learning and negotiation of meanings spaces for the construction of professional teacher identity by doing, key aspects of the development of the teachers' agency.

4.4 Creating OER as curriculum development

How are the processes of creating digital educational resources structured? At what point in this process can they convert to the OER model? Broadening the gaze towards the practices of creating educational resources, regardless of the scope and type of publication and licensing, allows us to observe other hidden dynamics of the individual and collective creation and authorship processes, and the practices of sharing and reusing.

Results provide a recovery from the process of creating teaching resources, from the perspective of the teachers' narratives. This allowed us to clearly identify a series of phases that we call: search, update, validation, improvement, sharing, in a circular activity oriented by the reflection and transformation of educational practices.

The creation of educational resources begins, in our cases, with a process of searching for existing resources on the subject. Search that is oriented both to resources of its own authorship (with extensions, improvements or adaptations of the resources already prepared) and to colleagues' materials. They reuse their own resources and work in successive layers for their validation, revision and improvement. They relate these processes of continuous improvement of educational resources to the reflection and transformation of educational practices. Emotional ownership [15], [16] and reappropriation [10] are the structuring axes of these circular practices of authorship.

As it is possible to observe, the OER model can, and should be, integrated into each one of the phases of the creation process that connect to the creation practices with the generation of virtuous circuits of reuse, with the center in pedagogy and reflexivity, teacher's agency and ownership of the curriculum.

4.5 Attitudes towards ownership, authorship and publication

An extensive knowledge of the potential of open educational and research work is manifested, in the discourse of all interviewees, when published openly [46]. Both institutional mission and professional identity combine to define the willingness to share openly content and knowledge. As seen in [38], the adoption of the OER, from a contextual perspective, is presented as a combination of individual will, professional development and institutional conditions, as structure and agency.

The motivation or willingness to share knowledge has been widely debated [58] [59]. Improving teaching, fostering student motivation and creating a bond with the institution are some of the reasons mentioned for open contributing, in addition to more altruistic reasons related to the movements of Open Access and Free and Open Software [60]. The most relevant motivations found in our study are also of a personal nature: teachers refer to contribution as the essence of academic work, which is

sharing. But also, with a dynamic typical of the Internet, "give the network as much as one gets out of it."

Among the requirements for sharing educational resources, they generally mention the attribution of authorship. Mentions are homogeneous in considering that resources must be shared in the same non-commercial way and reject the commercialization of derivative works. In particular, they relate it to the balance between creation and consumption of educational resources between institutions. In [61] great tensions between commercial use and open publication are also identified.

There seems to be a critical conscious perspective on the inequality of distribution creation and consumption in the geopolitics of OER. This aspect has not been identified in literature as part of an analysis carried out by teachers, although it has been addressed in critical studies already mentioned [62] – [68].

Similarly, we have noticed the approach of teachers in relation to the problems of internationalization and privatization of higher education and the fear of indiscriminate appropriation, which has also been widely analyzed [46], [69].

Also, in relation to ownership, teachers have expressed their views on the attitudes to be fostered to the care of resources, the rejection of the violation of authorship rights, the for-profit use, etc. Another emerging aspect is the monitoring and approval of modifications, very connected with emotional ownership.

In relation to authorship practices, several emerging models are presented. On the one hand, the individual authorship (the work belongs to the teacher who created it). A second model corresponds to the recognition of the role of the university within the framework of which the work is produced. The third model integrates the previous ones but adds relevance to other roles that participate in the work: graphic designers, pedagogues, content specialists, etc., in what corresponds to a collaborative or collective authorship model. The results are consistent with those identified in [52], [70]. The need to understand these results comes into play here in a broader scope that constitutes copyright literacy for a better understanding of ownership in authorship processes and copyright in the digital age [71], [72].

The devaluation that teachers express regarding the educational resources prepared by themselves in the framework of their teaching activities is very significant. The doubts center on what we have called "publishable" resources, in reference to the quality attributes that the teachers interviewed understand would enable them to share so that it would be favorably valued by someone. In this sense, the teachers understand that their conception that the resources to be shared must be validated, evaluated, and follow specific quality criteria, constitutes a barrier. The concept of self-efficacy becomes key in this regard [17]. Thus, the value of an educational resource, for them, would be associated not only to intrinsic factors of the resource itself, but with the projection of its emotional ownership, in terms such as "throw us down", "poverty", "I am not Harvard", giving account of a perception that gives value to their own work based on the prestige of the author. In his discourse, the transfer of institutional prestige in the validation of quality from the institution's own support, comes into play. Some of those mentioned, are the cases of UDELAR and UCV.

The question of ownership of the copyright of the works that teachers carry out, within their role in the university, emerges as a problem area under debate. The discourse identifies certain internal dialogues carried out by the teachers, a kind of confrontational attitude in which the ownership of the work is defended, accounting

for the real or symbolic existence of this debate, as well as the ignorance already revealed regarding copyright and their own rights in this framework. In the three cases analyzed, teachers present the claim that ranges from moral to patrimonial rights over their work. However, in all three cases, it is evident that it would also imply the recognition of the ownership of the university's rights over their work, as a contracting or financing entity.

5 Conclusions

The study of the adoption of OER, analyzed from the perspective of university teachers and their curricular context within the framework of their practices of development of educational resources, has allowed us to identify teachers' agency, and their practices of creating and sharing, as key factors for the development of emotional ownership.

Findings allow us to account for the personal and professional identity of the teachers as an important aspect to be identified in OER adoption studies. The relevance of teachers' agency has been identified as a central factor in the adoption of OER, which is complemented by looking at identities from a critical perspective.

Intellectual property and copyright, are located as one of the most relevant barriers to OER adoption, and include representations around: a) cultural aspects: academic culture, scientific culture, modes of production and circulation of knowledge, authorship; b) copyright literacy: competencies to develop ownership and knowledge about copyright; competences to apply it to the processes of creation, reuse, adaptation and open publication of their works; traditions and modalities of publication of teaching-oriented works: authorship rights, authorship fee; c) ideological aspects: the potential commercial use in publishing and sharing an OER, potential appropriation and use for profit by other people or institutions, criticism of the classical OER perspective and the mandate to use the widest possible license, including commercial use; d) fears: fear of appropriation, copyright and meanings around the culture of sharing, sharing polarity vs. appropriation, a culture of fear that does not contribute to the flow and virtuous circulation of works within the framework of open licensing systems.

Another area in which there are barriers to adoption, connected to emotional ownership and the perception of self-efficacy, refers to the self-perception of personal abilities: educational resources considered "publishable": devaluation with respect to the OER created by themselves within the framework of their teaching activities; quality attributes that teachers assign to share a resource so that it is favorably valued; the resources to be published openly must be validated, evaluated, follow specific quality criteria; value and validity: intrinsic factors of the material itself - its quality according to certain standards -; prestige of the author.

Recommendations to improve ownership and agency in the adoption of OER, derived directly from the results of this study, indicate the need to integrate these perspectives in the analysis models, as well as in the action frameworks for practice and policy development at institutional and / or national level, especially considering the areas of the UNESCO Recommendations on OER [1] related to building the

capacity of stakeholders to create, access, reuse, adapt and redistribute OER, and developing supportive policy for OER.

The adoption of OER should be addressed within the framework of the curriculum, understood not only as the content of teaching, but as processes and practices. Content and practice are both components of the curriculum. Developing teaching ownership over the curriculum, and teachers' agency, is one of the main challenges. Results highlight teachers' professional identity and agency, and should be considered regarding policies and capacity building. Integrating the perspective of OER articulated with the various areas of teachers' professional development, would allow them to feel their potential as agents of curriculum change. Results also show the need to strengthen the development of institutional capacities on digital skills of teachers and copyright literacy, through specific programs, aimed at empowering teachers with knowledge for the broad exercise of their capacities to share openly.

Peer groups can exert influence at the micro level, as learning spaces for the negotiation of meanings and the construction of teachers' professional identity, favoring emotional ownership over OER, and consequently, their adoption. Educational communities should be at the center of policies and action frameworks. The collaborative component provided by communities of practice, operates as an interface between the teaching staff and the institution, allowing to overcome the absence and the development of bottom-up policies.

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