

The Perceptions of Open Educational Resources by Teaching Staff in Higher Education in Ireland

Amy Hayes

Academic Programmes, Dublin Business School, Dublin, Ireland

© Author(s). This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc-sa/4.0/>

Abstract

The aim of this study was to evaluate the impact of Emergency Remote Learning on the perceptions of Open Educational Resources. This was achieved by comparing the perspectives of academic teaching staff in this research with those documented in pre-COVID-19 studies. A total of 105 participants from 16 institutions in Ireland were surveyed using a combination of quantitative and qualitative questions. The findings indicate that the shift to Emergency Remote Learning has not significantly diminished the perceived barriers to Open Educational Resources. Instead, it has brought forward fresh concerns about the implications of Open Education on conventional teaching methods. Although a national policy would grant individual institutions the autonomy to devise courses in line with their mission and strategy, the outcomes of this study highlight the need for practical assistance, training, and guidance at an institutional level.

Keywords: Open Educational Resources, Open Access, Teaching and Learning, Open Pedagogy.

Introduction

“Open Educational Resources (OER) are teaching, learning and research materials in any medium – digital or otherwise – that reside in the public domain or have been released under an open licence that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions” (UNESCO, 2019).

This study aimed to evaluate the influence of COVID-19 and the transition to Emergency Remote Learning (ERL) on the perceptions of Open Educational Resources

(OER) among teaching staff across various disciplines and levels in Irish Higher Education Institutions (HEIs). In addition, this research attempted to gauge staff awareness of the copyright status of materials produced by staff, and whether their institutions promote the creation and dissemination of OER through training or policy development. Relatively few studies are emerging on the effects ERL has had on OER-enabled pedagogical approaches – especially in Ireland. The global pandemic provided a unique opportunity for its potential uptake. It is possible that strategies to raise awareness, along with the establishment of OER repositories and databases like OER4COVID, may have struck a chord with educators compelled to adopt novel online teaching practices during the lockdown period. In fact, a lecturer at Manchester University, who both creates and utilises OER, regarded the transition to ERL as an experimental platform for exploring and promoting OER (Rimmer, 2020). The effects of this are yet to be determined, or at least widely published.

While there is an international call for OER policy, as seen in the *Recommendation on OER* set forth at the UNESCO Conference of 2019, Irish HEIs lack a comprehensive national-level OER policy and cohesive strategy. In the absence of explicit directives or guidelines in this area, the inclination to embrace an OER-focused pedagogy is likely to remain an individual choice.

Since the 1960s, open education initiatives have emerged, aiming to emancipate education from various forms of oppression, emphasising universal educational access, and empowering learners (Lane, 2009; Cronin, 2019). The “concept, philosophy, and practice of open education is built on a long history of social, political and education movements seeking to widen access to education and reduce inequality” (Cronin, 2019). Due to its association with social activism, political movements, and the advancement of technologies, the interpretation of open education has evolved over time (Stracke et al., 2019), leading to some ambiguity in defining this movement (Cronin, 2017). In the 20th Century, with the rise of open universities, the movement was associated with open admissions and distance learning (Lane, 2009; Stracke et al., 2019). However, evolving alongside developments in digital, mobile, and social technologies (Cronin, 2019), the movement has become characterised by open content, open educational resources, and MOOCs (Stracke et al., 2019; Wiley and Gurrell, 2009).

Irrespective of the various interpretations of the movement, it remains embedded in the belief that barriers to education should be moveable and learners should be empowered by making available the resources necessary for them to take control of their educational journey. Moves towards this ideal are often met with resistance or suspicion, due to a lack of understanding (Cronin, 2019) or the outdated perception that higher education is reserved for the elite (Biswas-Diener and Jhangiani, 2017).

OER are guided by the idea that high-quality educational materials should be available to everyone. They are openly licensed, the benefit of which allows users – not necessarily the creator – to personalise materials and infuse them with up-to-date content (OER Commons, 2022). The licence provides users with free and perpetual permission to engage in the 5R activities: Retain; Reuse; Revise; Remix; and

Redistribute (Wiley, n.d.). Common examples of OER in higher education include Massive Online Open Courseware (MOOCs), Open Textbooks, streaming videos, Open Access Journals, slideshows, and lecture notes, with the field continuously evolving alongside technological advancements, Open Access policies, and social media platforms. Coyne and Fitzpatrick (2021, p. 4) underline that “OER present a unique opportunity as an emerging and equitable way to transfer knowledge and have yet to be rigidly defined as one thing or another,” highlighting their versatility and adaptability to various academic modules and pedagogies.

The National Digital Learning Resources (NDLR) in Ireland, initiated in 2004 as a pilot project by the Irish Higher Education Authority, facilitated educators in publicly funded higher education institutions to create, share, and distribute digital teaching resources openly (Risquez et al., 2020, p. 101). It also served as a repository platform for storing and retrieving shared resources, alongside a Community Portal fostering communication and collaboration across different subjects and institutions. Although the NDLR aimed to promote and support collaboration, development, and resource sharing among Higher Education sector staff (McAvinia and Maguire, 2011), it was discontinued in 2012 due to financial constraints amid the global economic downturn.

Since then, the National Forum’s eye has seemingly turned to individual institutions’ repositories to support OER sharing and sustainability in Ireland – a devolved method of OER management that has yet to be proven effective. But if the Open Movement grows in tandem with technological advances, and is also somewhat shaped by the society in which it is growing, then the effects of the global pandemic arguably have the power to influence the trajectory of the future of Open Educational Resources.

Literature Review

The three themes that emerged from this review are: Barriers to Implementation; COVID-19 and Emergency Remote Learning; and Policy Development and Implementation Considerations in Ireland.

Barriers to Implementation

Of the studies published that have attempted to gauge staff awareness of OER, it is common to report low levels of cognizance of the term itself (Allen and Seaman, 2014; Appiah et al., 2020; Rolfe, 2012; and Reed, 2012). It is therefore unsurprising that the studies that report low levels of awareness also report low levels of OER-related engagement. Alternatively, some studies emphasise this correlation further by reporting a high level of OER-awareness alongside a high level of OER usage (Nwesri, 2019; Ogunbodede et al., 2021).

Limited research of this kind has been conducted within an Irish context. The 2015 project by the National Forum for the Enhancement of Teaching and Learning highlighted that 47% of the 192 respondents acknowledged their familiarity with OER. However, it was cautioned that this figure “represents less than half of those who, it could be argued, were most interested in OER and/or most motivated to respond, given the self-selected nature of the survey,” suggesting that the actual awareness levels

within HEIs may be considerably lower (NFETL, 2015, p. 74). A focus group consisting of OER specialists identified the vagueness surrounding the term OER as a significant hurdle to advocating for and enhancing awareness of OER within institutions (Risquez et al., 2020). Similarly, Cronin's doctoral research in 2018 captured a non-existent awareness level within her sample university. The investigation on openness and praxis revealed that while academic staff used various freely available digital resources in their teaching, there was no recognition of the term OER and no apparent differentiation between 'free' and 'openly licensed' resources, prompting the question of whether the deficiency in awareness pertains more to the terminology of OER rather than the practice itself. It is plausible that some members of the academic community integrate OER into their modules without encountering the term specifically.

Additionally, there exists a misconception regarding the advantages and opportunities of OER. A common scepticism cited is resources available for free must inherently lack quality (Wals, 2015). Risquez and McAvina found in their Irish study of VLE versus OER that “staff interpreted sharing in a narrow sense, and one not consistent with the open education movement” (2018, p. 92). Misconceptions of quality, coupled with a lack of understanding of collaborative opportunities, represent mindsets that demand additional time, comprehensive training, and a deeper understanding to be overcome. Theoretically, awareness is a relatively simple barrier to eradicate. Indeed, the literature suggests that it is not a critical barrier at all, but moving beyond the basic understanding of the term to the advanced stages of implementation serves as a greater obstacle.

In their global systematic literature review of OER, Luo et al. (2020) highlighted discoverability as the primary obstacle, as faculty members expressed frustration over the considerable time required to locate suitable and high-quality materials. Moreover, insufficient or incompatible metadata standards and practices resulted in many OER searches being unproductive (Luo et al., 2020). Similarly, the extensive study conducted by Allen and Seaman in the United States identified discoverability as the chief hurdle to OER adoption, with more than half of the participants (57.5%) identifying the “lack of a comprehensive catalog” as the major challenge. The study also emphasised that “all three of the most mentioned barriers are related to the ease of finding appropriate material” (2014).

The National Forum came across similar perceptions during their national study of OER use and perceptions in Ireland: “Respondents reported that the most important deterrents to the use of OER in their courses were quality (20% of responses), time (17% of responses) and the lack of relevant materials (also 17%)” (NFETL, 2015, p. 75). These issues were previously addressed with the ill-fated NDLR project that was discontinued in 2012. The centralised ecosystem “provided a platform for creating OER... while harvesting and disseminating OER from other national repositories” (Risquez et al., 2020, p. 102). Following the national study in 2015, the National Forum proposed a “system-led action around a devolved approach to OER management that relied on hosting teaching and learning OER in existing research institutional repositories” (Risquez et al., 2020, p. 102). However, in the follow-up analysis, it was revealed that almost 60% of survey respondents did not have/did not know if they had an institutional repository or were unsure of what a repository was. Of those who

declared having an institutional repository, 49% viewed it as inappropriate for sharing OER (Risque et al., 2020).

What is not explicitly stated but alluded to in a lot of the literature is the workload entailed in maintaining an OER-enabled pedagogy. In the absence of support from higher authorities, this workload is likely to be disregarded in favour of other required and incentivised duties. To see a broader uptake of OER, it must be given the same level of importance at an institutional level as commercial tasks. The sustainability of an OER-enabled pedagogy needs a suitable and reliable platform for sharing and sustaining OER as well as recognition and reward equal to the time invested in OER creation and adaptation.

The final recurring challenge that emerged from the literature is legal uncertainties (Otto, 2019; Luo et al., 2020; Ramsingh, 2021). Conventional copyright laws, designed to safeguard creators of intellectual content from unauthorised use or unlawful reproduction, also extend to OER. However, the framework of copyright is replaced by Open Licensing, such as Creative Commons, albeit with certain restrictions (Patel, Prakash, and Parekh, 2021). The implementation of a Creative Commons License enables the utilisation of OER materials by others, based on the conditions specified by the creator, thereby eliminating the need to reach out to the creator for explicit permissions or ascertain the copyright status of the work (Seibert, Miles, and Geuther, 2019). This is a complex matter and, without an understanding, has the potential to deter many willing participants from OER adoption and use. It elicits a specific question of how copyright complexities could affect OER use in certain fields, for example, educators in the arts, specifically where copyright laws would hinder the distribution of creative works beyond fair use in the classroom.

Risque and McAvina conclude their discussion with an unanswered question as to whether copyright confusion causes a lack of engagement with OER use in Ireland (2018). Nevertheless, Cronin's interviews and surveys of Irish academics present a more definitive narrative. Merely 38% of the participants acknowledged an understanding of Creative Commons licensing, while the qualitative analysis unveiled that "the tendency was to rely on the 'educational use' or 'fair dealing' provisions of Irish copyright law or simply to use materials regardless of copyright status" (2018). Beyond the realm of Creative Commons and OER utilisation, it is imperative for academics to be cognisant of the copyright status of their created materials within their workplace, in order to safeguard their work. Consequently, an understanding of such policies could potentially expand their awareness of alternative licensing and agreements.

COVID-19 and Emergency Remote Learning (ERL)

The disruption COVID-19 caused to academia forced faculty and teaching staff to make major changes to their operations in an extremely restricted timeline, resulting in "overwhelming expectations to transform themselves immediately into digital pedagogues" (Havemann and Roberts, 2021, p. 5). ERL highlighted various fundamental societal and institutional challenges: limited accessibility to devices, connectivity, and electricity; inadequately prepared staff for the transition to ERL; differing degrees of institutional support; and the necessity for adaptability from both students and faculty. (Rimmer, 2020; Kanwar, 2021; and Bacon and Peacock, 2021).

Numerous adjustments essential for facilitating the transition to ERL saw the need for educational institutions to lean on private enterprises for the efficient and seamless operation of fully online education. Notably, certain publishers reacted to the pandemic by relaxing license constraints or temporarily providing access to research collections (Carbery et al., 2020). However, this access began to be withdrawn from academic libraries as early as June 2020.

In their report, Williamson and Hogan address the financial strain of educational and digital resources this intersection of private and public sectors has caused: “It exemplifies how ‘disaster techno-capitalism’ has sought to exploit the pandemic for private sector and commercial advantage” (2021, p. 2). This is evident in the eBook crisis rippling through higher education on a global scale. Current eBook licensing practices and fees are eradicating the central mission of libraries, with negative consequences for equity and access to information for curriculums and research alike: “hundreds of textbook titles listed are as much as 4000% more expensive to purchase than their equivalent in hard copy format, and the complexity of their licensing terms is fiendish” (Anderson and McAuley, 2022, p. 2).

While advances are being made in the open movement, the pandemic has shone a light on the grip private companies and big publishers have on academia. Understandably, a recurring theme in the case studies within the literature reveals that educators who had previously engaged with an OER-enabled teaching approach before the pandemic were more receptive to its advantages compared to those who were unfamiliar and had to start from scratch within a brief and stressful timeframe. The literature is predominantly influenced by those more committed to OER, creating a significant gap regarding the experimentation or integration of OER during Emergency Remote Learning (ERL). It remains unclear whether this gap is due to insufficient research or documented instances, or a general lack of adoption among faculty in higher education. Echoing Rimmer’s previous observations about the pandemic as a trial ground for OER experimentation, the UNESCO OER Dynamic Coalition has asserted that the pandemic has “triggered a consensus at governmental and institutional levels on a strong need to develop OER” (2021). This could potentially serve as a catalyst for reshaping policy implementation and design in the future.

Policy Implementation and Consideration in Ireland

The Recommendation on OER promotes and endorses the integration of OER policies into national policy frameworks and strategies, ensuring their alignment with existing open policies (UNESCO, 2019). Although Ireland has established national policies for Open Access and Open Data, there is presently no national policy concerning OER, perhaps contributing to a widespread absence of OER policy within higher education institutions (Coyne and Alfis, 2021). To support Member States implementation of the 2019 Recommendation on OER, UNESCO established the OER Dynamic Coalition, which “aims to support networking and sharing of information to create synergies around the five areas of action of the recommendation”:

- building capacity of stakeholders to create, access, re-use, adapt and redistribute OER;
- developing supportive policy;
- encouraging inclusive and equitable quality OER;

- nurturing the creation of sustainability models for OER;
- facilitating international cooperation (2022).

Given the previously discussed barriers to OER, the establishment of a well-defined and succinct policy concerning OER, whether at the national or institutional level, could effectively alleviate the concerns pertaining to legal uncertainties, institutional support, and sustainability. Consistently, the literature advocates for institutional policies and frameworks to facilitate the adoption, remixing, and sharing of high-quality OER. As Cronin notes, individual teachers and learners adopt OER all the time, but institutions “should create clear open education policies and practices” to allow them to adopt more flexible, strategic, and critical approaches (2019). Like any policy change or implementation, organisational and cultural change is required. When it comes to recommendations, much of the literature proposes incentivising OER within the institution to promote the sharing of individual work among the faculty and the broader community. (Wals, 2015; Risquez et al., 2020; Orzech, 2021; Ramsingh, 2021; and Havemann and Roberts, 2021).

Literature Review Conclusion

There are very few resources on the experiences of teaching staff with OER use during ERL – what is written is commonly from the point of view of librarians, advocates or representatives of teaching and learning forums. While some of the literature alludes to the division of educators who will go forth and embrace teaching methods adopted during ERL in a post-pandemic world and those who will revert to the “old normal”, there is not a substantial body of work to draw conclusions on the potential change of perceptions of OER or OER-enabled pedagogy by teaching staff due to the pandemic.

What is evident is the necessity for significant policy and organisational changes in this domain. The initiatives taken in Ireland and globally so far have largely been experimental. Various examples and case studies, primarily from an institutional perspective rather than a national initiative, shed light on the efforts required to establish such an environment. Notably, the Delft University of Technology in the Netherlands, in October 2021, formalised the engagement of all on-campus stakeholders through the signing of the Open Educational Resources Policy (de Jong and Will, 2022). The theory versus reality of OER implementation highlights the hurdles and issues faced by those further along the journey (Cronin, 2019). Pressing concerns such as legal issues, insufficient digital literacy, and copyright challenges persist (UNESCO, 2019). To address these challenges, TU Delft initiated the OE Project, a series of programs aimed at easing faculty into OER practice. This project tackled issues such as the high cost of educational materials, recognition of teachers' efforts, and the encouragement of a more participatory learning approach for students. Consequently, TU Delft has identified several key successes of this policy, including recognising students as partners, supporting open textbook authorship, and positioning the library as a driving force. The recognition of the importance of faculty collaboration and the provision of adequate and continuous funding are explicitly acknowledged as imperative to the project's success (de Jong and Will, 2022).

In the realm of open education policy and mandates, Ireland is still in the experimental phase. The discontinued NDLR project was followed by a seemingly unsuccessful attempt over the last ten years to encourage individual institutions to make

their repositories OER-friendly. Ireland has the advantage of looking outwards at success stories from across the globe. Right now, there appears to be no central roadmap for what to do next, in what order, and with what policy, for HEIs.

Methodology

This research aimed to answer the question: to what extent, if any, has COVID-19 altered the perceptions of Open Educational Resources (OER) by teaching staff in higher education in Ireland?

Data collection took place for this study via a mixed-methods online survey. The survey took approximately 5-8 minutes to complete and consisted of 18 questions focused on determining the study's variables (institution of work, school of discipline and length of time in the role), OER use during COVID-19, perceptions of OER, and, finally, institutional support surrounding open access and OER.

The research aimed to provide an overview of the perceptions of OER by academic staff, regardless of their previous experience with the resources, and review possible reasons a lecturer may choose to adopt or forgo such materials. For this reason, the survey allowed for both positive and negative responses. One of the limitations to this study is the ambiguous nature of OER and a broad lack of awareness or understanding of the term. As such, it was understood early on that the self-selective nature of the survey could result in a low participation rate with most respondents being aware or active users of OER. It was shared on social media platforms, such as Twitter and LinkedIn, as well as distributed by email. In total 1,968 surveys were sent to teaching staff in 17 institutions across the country. Special care was taken to ensure surveys were sent to various disciplines via staff directories. Feedback was received from a vast array of teaching staff from different disciplines and institutions and the data may contribute to the mapping of patterns pertaining to certain subjects, organisations, or regional areas.

Findings

OER Use

105 participants from 16 HEIs across Ireland responded to this study's survey. 64% of those participants claimed to use OER during the pandemic while 29% definitively stated that they did not. A small 7% claimed to be unsure. The breakdown of OER use by institution is as follows:

Table 1: OER Use by HEI

During ERL, did you utilise any OER already in existence in your course?	
Atlantic TU	3
No	1
Yes	2

<u>DBS</u>	<u>7</u>
Unsure	1
Yes	6
<u>Dublin City University</u>	<u>15</u>
No	10
Unsure	1
Yes	4
<u>Dundalk institute of technology</u>	<u>5</u>
Yes	5
<u>Griffith College</u>	<u>3</u>
No	1
Yes	2
<u>IADT</u>	<u>4</u>
No	2
Yes	2
<u>Maynooth University</u>	<u>4</u>
No	1
Yes	3
<u>National College of Ireland</u>	<u>5</u>
No	1
Yes	4
<u>National University of Ireland Galway</u>	<u>1</u>
No	1
<u>SETU</u>	<u>3</u>
No	2
Yes	1
<u>Technological University Dublin</u>	<u>11</u>
No	2
Yes	9
<u>Trinity College Dublin</u>	<u>6</u>
No	1
Unsure	2
Yes	3
<u>TUS</u>	<u>7</u>
No	2

Yes	5
<u>University College Cork</u>	<u>4</u>
No	1
Yes	3
<u>University College Dublin</u>	<u>21</u>
No	4
Unsure	2
Yes	15
<u>University of Limerick</u>	<u>5</u>
No	2
Unsure	1
Yes	2
<u>Unknown</u>	<u>1</u>
Yes	1
Grand Total	105

The department or field that the participants belong to is also a considerable variable in OER use. For this analysis, fields which received 3 or more responses were considered.

Table 2: OER Use by Field/Department

During ERL, did you utilise any OER already in existence in your course?	
Arts and Humanities	17
Yes	13
No	3
Unsure	1
Business	36
Yes	17
No	15
Unsure	4
Education	3
Yes	2
No	1
Engineering and Architecture	5
Yes	3
No	2

Health and Agricultural Sciences	4
Yes	3
No	1
Science	12
Yes	7
No	3
Unsure	2
Social Sciences and Law	20
Yes	15
No	5

Of the 67 participants who reported using OER during ERL, 56 (83.6%) claimed to have ‘used OER prior to ERL and continued to do so’. This would suggest that 11 of the 105 participants of this survey (10.5%) became first-time users of OER during the pandemic. Of these 11 participants, the following statements were checked:

- ‘I used OER as a replacement for certain F2F techniques that could not be done in lockdown, i.e. experiments/field trips’ (81.8%);
- ‘OER were shared with by colleagues’ (27%); and
- ‘I will continue to use these OER in a post-pandemic environment’ (64%).

Of the 31 participants who answered ‘No’ to using OER during ERL, 13 (42%) chose the statement ‘I was not aware of OER during ERL’. This would suggest that 14% of all 105 respondents to this study’s survey had no awareness of OER during the shift to ERL. The 14 remaining participants of this question checked the following statements:

- ‘I was aware of OER during ERL, but did not know how to access /find them’ (14%);
- ‘I was aware of OER during ERL, but did not want to use them’ (50%);
- ‘I was aware of OER during ERL, but I could not find relevant or high standard OER for my course’ (71%); and
- ‘I was aware of OER during ERL, but I had difficulty understanding the copyright complexities of open licensing’ (21%).

These findings suggest that those new to OER during ERL came to the resource to replace face-to-face techniques that were difficult to replicate or conduct online, while finding relevant OER was possibly the biggest barrier to OER adoption during this time.

Perceptions of OER

Two open-ended questions were asked to ascertain the perceived concerns/barriers of teaching staff adopting OER in higher education in Ireland, as well as the perceived benefits/opportunities. The structure of these questions allowed for multiple answers per response.

Perceived Barriers/Concerns to OER Adoption:

- Change Culture (52 responses)
 - Time-Cost
 - Training
 - Copyright Complexities
 - Disruption to F2F Learning/Student Engagement
 - Negative Connotation
- Discoverability (30 responses)
 - Finding OER
 - Lack of Relevant OER
 - Accessing OER
- Quality (30 responses)
- Awareness (17 responses)

Participants who belong to the Arts and Humanities field, which has the highest rate of OER usage in this study, cited quality and copyright complexities as their top concerns or barriers to OER adoption. Participants who belong to the Business field, which has the lowest rate of OER usage in this study, cited relevance, quality and awareness as their top concerns or barriers to OER adoption.

Perceived Benefits/Opportunities of OER Adoption:

- Enhanced Teaching/Learning Experience (100 responses)
 - Support
 - Engagement
 - Flexibility
 - Diversity of Materials/Ideas
 - Time-Saving
 - Potential for Quality Resources
- Accessibility (42 responses)
 - Ease of Access
 - Cost-Savings
- Sharing/Collaboration Opportunities (16 responses)

Participants who belong to the Arts and Humanities field, which has the highest rate of OER usage in this study, cited timesaving and flexibility as their top benefits or opportunities for OER adoption. Participants who belong to the Business field, which had the lowest rate of OER usage in this study, cited support as additional material and opportunities to widen perspectives as their top benefits of OER adoption.

Awareness of Institutional Policy

It emerged from this study that there is a vast misunderstanding or lack of awareness surrounding institutional support or policy regarding Open Access, copyright, training, and OER.

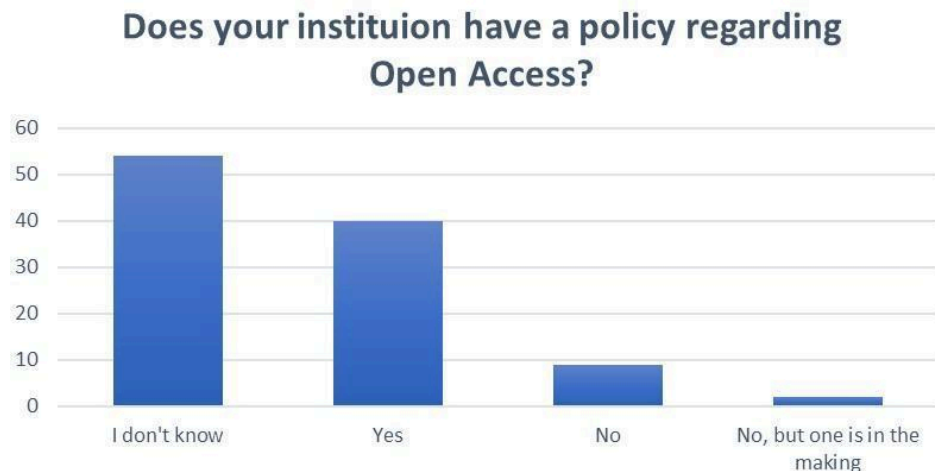


Figure 1: Open Access Policy Awareness

Of the 67 'Yes' responses to using OER during ERL, 31 (46%) are unaware of whether their institution has an Open Access policy. This could be interpreted as almost half of the OER users in this study acting without the influence of an open policy to indulge in open education methods. The data from this question is contradicting, with responses from the same institution showing conflicting information.

When asked if their institution has a policy regarding OER specifically, awareness levels drop further, as shown in the bar chart below.

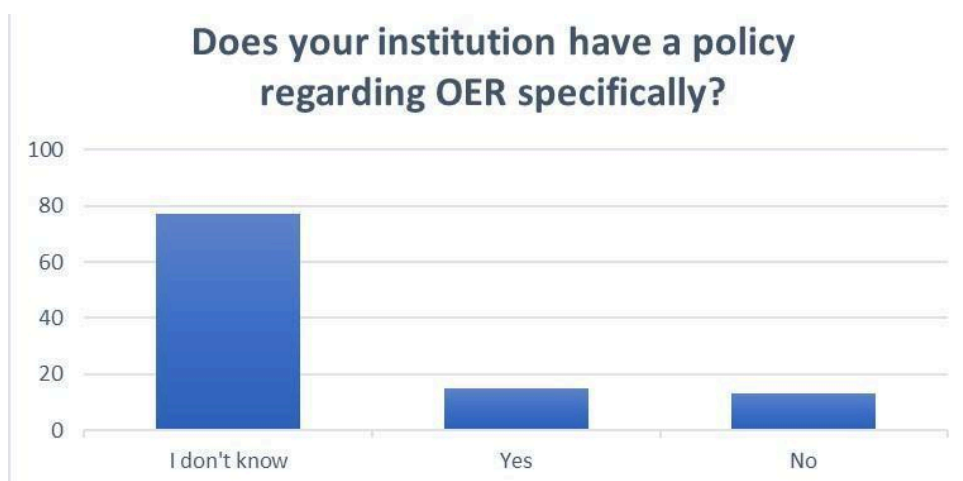


Figure 2: OER Policy Awareness

73% of all survey respondents do not know if their institution references OER specifically in a policy. Of the 67 respondents who reported using OER during ERL, 44 (66%) are unaware if their institution has a specific OER-related policy. This further

suggests that a significant percentage of OER users in this study are uninfluenced by policy in their adoption of OER-use. The contradictions presented in these questions further suggest that awareness levels are lower than those which are captured in the above chart.

Similar patterns are shown when participants were asked about the copyright status of materials produced by staff in their institution. 54% are unclear or unaware of their institution's policy, while the remaining responses contradict others from the same institution. Of the 67 respondents who reported using OER during ERL, 33 (49%) reported that the copyright status of materials produced by staff is unknown or unclear to them.

Awareness of Institutional Support

45% of respondents are unsure of the suitability of their institutional repository for sharing OER, while 35% claim it is suitable. Of the 22 participants who previously selected the statement 'I shared OER with others in my related field', 10 (45%) reported being unsure if their institutional repositories were suitable for sharing OER, while 9 (41%), claimed it is suitable. It was not asked, nor do the statements specify, how the OER was shared and therefore it cannot be assumed that it was or was not via the institution's repository.

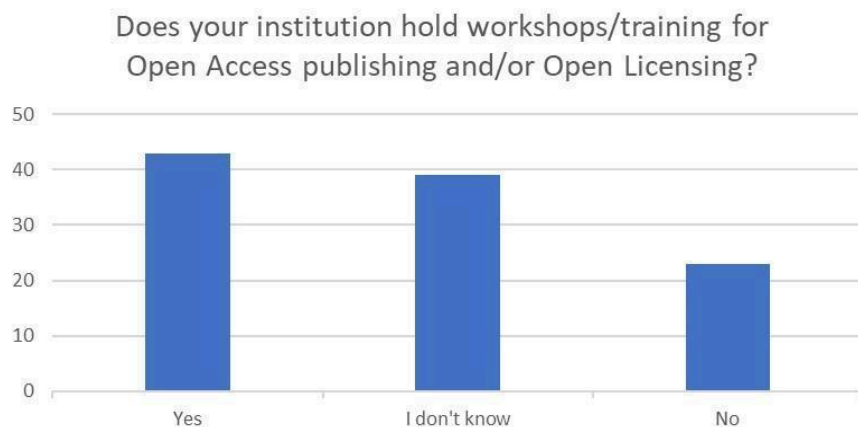


Figure 3: Workshops/Training for OA Publishing and Licensing

43 (41%) stated their institution does hold workshops and/or training in OA publishing and/or licensing. 39 (37%) are unsure, while 23 (22%) stated it does not. However, the contradictions in this question which derive from comparing responses from the same institutions suggest awareness levels are much lower than they appear.

As shown in the figure below, awareness levels drop significantly when asked about OER training specifically. Of the 43 participants who stated their institution provides training in OA publishing and/or licensing, 18 (42%) claim to not know if their institution does the same for OER. 22 (51%) stated their institution does, while 3 (7%) stated it does not.

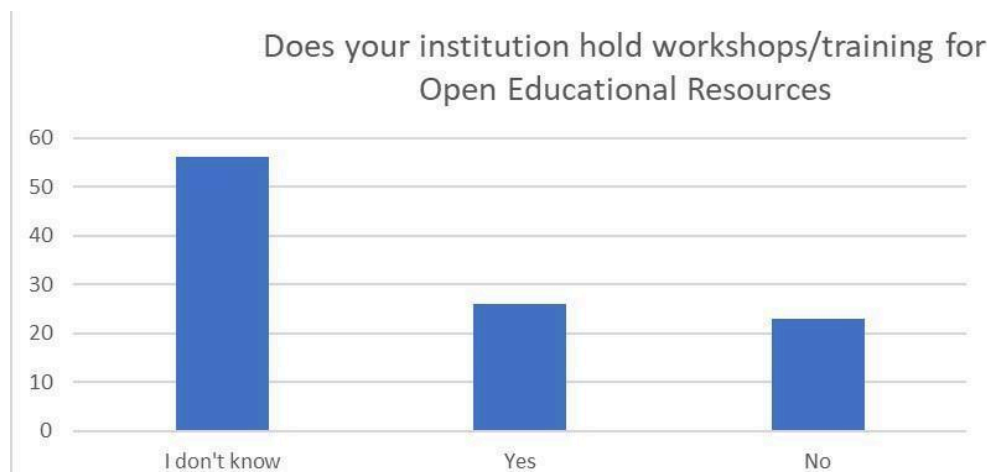


Figure 4: Workshops/Training for OER

Ultimately, awareness levels of institutional policy and support pertaining to the creation and use of OER is very low across the variables. Although 66% claim their institution encourages the consideration of open licensing and releasing work as OER, it is not clear from the answers given in this study how that is. The data strongly suggests that awareness levels of such policy and training are lower than the answers given, as contradictions present themselves in every question from this section.

Discussion

Awareness

The survey's self-selecting nature was expected to attract respondents already acquainted with OER terminology if not actively engaged with the educational resource. This is a probable reason for the relatively low response rate. Therefore, the study did not aim to specifically measure awareness of the term and concept.

However, when the National Forum's findings are broken down, 15% of 192 respondents stated they were not aware of OER, while 38% were aware of the term but either did not know much about the resource or did not know how to utilise it (NFETL, 2015). Similar statistics were found in this study in that 14% of the 105 participants specifically stated that they were not aware of OER during ERL, with awareness, or lack thereof, placing second in the top perceived barriers to OER adoption. Additionally, 1 participant added in the final comments: "Many faculty members (and students) consider all resources available on the internet to be available for use in their classes. e.g. Scribd, Chegg, etc. There is little or no distinction made between OER and these resources". This is a similar finding to Cronin's doctorate, where she noted there was little distinction between 'free' resources and 'openly licensed' resources (2018).

Given the expectation that the majority of respondents would possess at least some familiarity with the term OER, this study aimed to assess the differences in pre- and post-pandemic perceptions of the resource. However, certain comments within the responses have suggested that this survey indirectly raised awareness of OER, open policies, and institutional support: "Thanks for the invitation. This study encourages me

to find out more about my institution's overall approach to Open Access - I am not entirely clear as to its policy"; "Never heard of OER but I should know about it."; "Am new in post and so am unsure as yet"; and "This has opened my eyes as someone who should know more about this, it's clearly an area which requires further consideration in my institution". This positively indicates that ongoing advocacy in this area by individuals in the field can effectively increase awareness of OER.

Perceptions of OER

When asked 'Do you believe there is value to Open Educational Resources for teaching staff in higher education?' in this study, 104 (99%) of participants answered 'Yes'. Indeed, the responses primarily highlighted perceived benefits relating to an enriched teaching and learning experience. Many participants appreciated the support that OER can provide, along with the diverse range of materials, expert opinions, and case studies it offers.

Based on the qualitative feedback in this survey, a number of participants provided passionate opinions about the accessibility of resources in higher education. In relation to Open Access (OA) in particular, several comments implied that prioritising the publication of OA papers (or in OA journals) and eliminating paywalls is currently more crucial than integrating OER into their pedagogy. OER and OA publishing of academic journals and eBooks are intrinsically linked. John McMurry, author of the bestselling 'Organic Chemistry' academic textbook, published the 10th edition of his textbook as an OER textbook with OpenStax (Knox, 2022) which is arguably a huge endorsement of the credibility of OER, as well as highlights potential avenues of solutions for the current eBook crisis in higher education. Indeed, TU Delft has been fostering a culture of open textbook authorship since the launch of their OER project which, deliberately or not, tackles the eBook crisis in their university (de Jong and Will, 2022). The open movement, though vast and ever-growing, does not explicitly foster segregated avenues. Progress in OA publishing can aid in eliminating obstacles to OER development, and conversely, advancements in OER creation have the potential to facilitate the growth of OA publishing.

Alternatively, a wide range of issues were presented in this study regarding barriers and concerns to OER use and adoption. To summarise the findings, the greatest concerns were the perceived lack of quality OER available and the inability to locate or access relevant OER to their modules or courses. This is much the same in the 2015 Irish study: "the most mentioned challenge related to the discoverability problem and the time it takes to find relevant material" (NFETL, 2015, p. 82). Moreover, this observation resonates with the global studies discussed previously in the literature review. Consequently, it appears that despite the introduction of initiatives such as OER4COVID, the pandemic has had minimal to no impact on the discoverability issues perceived by Irish faculty in higher education.

At the core of most cited concerns, the larger issue of change culture became evident. There was a stigma expressed by some responses that using OER can be seen as lax teaching, or that academic staff are quite conservative by nature and would be reluctant to share their work. However, the predominant sentiment was the expressed requirement for more structured support from institutions through training, acknowledgement, and sustainability initiatives. Staff recognise the necessity of

institutional backing and guidance in this realm to effectively integrate OER into their modules in a pedagogically sound manner. There is a call for training in areas such as copyright and open licensing, and most notably, for time.

While most perceived barriers and concerns echo what has been previously discussed in the literature, some comments presented new concerns. Specifically, 6 participants commented that OER could indirectly lead to lower face-to-face student engagement in their modules. This concern is not captured in the 2015 Irish study and, additionally, has not been seen in the literature reviewed for this research that predates the pandemic. A separate study would need to occur to discern to what extent OER contributes to falling in-person attendance rates in higher education. Whether proven or not, this concern is important to address when breaking down barriers to OER implementation.

The pandemic has had little effect on eradicating existing barriers to OER adoption by teaching staff in Ireland, rather it appears to have elicited new concerns steeped in challenges brought on by ERL. The unpredictability surrounding the trajectory of teaching and learning in higher education, driven by the heightened demand from students for greater flexibility and accessibility, has left some faculty members apprehensive about the expectations for their teaching methods in the future. Just as with the recommendations for the current obstacles to OER adoption, guidance in this realm through institutional support and policies is crucial in the context of post-pandemic education. This new perceived concern speaks more to the pedagogical expectation of teaching staff going forward than it does of OER use and is one of the many new challenges brought on by the pandemic that higher education is facing.

Institutional Policy and Support

Both the literature and the findings of this study indicate a notably low level of awareness or comprehension of OA and copyright policies at an institutional level. This issue is not only a concern for the open education movement but also for the safeguarding of the works produced by the participating academics in this survey. The Recommendation of OER by UNESCO was declared in 2019, and Coyne and Alfis published a paper lobbying for OER policy and infrastructure in higher education in Ireland in 2021, so proof of the existence of an OER-specific policy in institutions was not expected to emerge from this study. Nevertheless, the disparity in responses regarding OA and copyright policies, which do exist at national and institutional levels in Ireland, implies the need for greater guidance and support in this domain to ensure clarity among faculty and facilitate their involvement in open education.

In the concluding remarks section, a participant took the opportunity to delve into the intricacies of the copyright status of materials produced by faculty members in their institution: “The copyright situation is rather complex and though dependent on one’s role the norm is materials pertaining to a 'named' programme are the IP of the institution, however, the materials used in teaching may be considered the IP of the individual. Except if those materials are hosted on the VLE, then that is considered an institutional publication and the IP of same! This would obviously influence how individuals may create and share materials...”

Given the general absence of policies specifically addressing OER, it falls to individual academics to interpret the existing Intellectual Property (IP) policies to ensure the appropriate use and/or ownership of resources. Although not explicitly stated in this study, concerns regarding infringement or misunderstanding of complex IP policies have been documented in the 2015 Irish study, as well as in Cronin's doctoral work from 2018. Participants in this study frequently highlighted time constraints as a significant obstacle to integrating OER, including the time required to interpret, comprehend, and adhere to ambiguous or unclear IP policies. Revising such policies to offer clearer guidance on teaching materials would help alleviate the apprehension of infringement or potentially encourage the sharing of such materials. Furthermore, only one participant in this study referenced Creative Commons licensing in the open-ended questions, specifically in the context of identifying areas where institutions need to provide training.

The findings of this study, in alignment with the existing literature, indicate that OER in Ireland are still being explored, adopted, and implemented primarily through a bottom-up approach. Over half of the participants utilised OER in some capacity during the pandemic, yet there remains a notable lack of awareness regarding policies or support for such resources. Policymaking, though imperative, does not equate to automatic change in the open movement. Indeed, policy is not necessary for most academics who undertake an OER-enabled pedagogy. Rather, it is a meaningful acknowledgement by the institution that this area of open is recognised or considered worthy of policy, and as such lays the foundation for proper strategy and change culture to take place.

Many of the concerns articulated by the participants in this study are echoed globally, where institutions have made strides to eliminate such obstacles. These global case studies can serve as a source of inspiration for Irish institutions to investigate the most suitable model or framework that aligns with their mission and values. The National Forum proposes that institutions consider the University of Edinburgh, which has an Open Educational Resources Policy, as a beacon of innovation (2021). Individual academics can only achieve so much independently or in small cohorts to maintain a comprehensive OER-enabled teaching approach if they wish to do so. In an Irish context, it has been noted that “there is a strong rationale for a more in-depth understanding of issues that includes policy makers involved in implementing institutional OER strategy, academics who use OER, academics who have not yet used OER, and students” (Risque et al, 2020, p. 110).

Mandates that facilitate accredited continuous professional development in copyright and FAIR data management, along with training in Altmetrics and Open Access Monitoring to comprehend the usage, metrics, and data citations associated with OER, are crucial aspects for improvement that could significantly bolster the adoption of OER in higher education. These recommendations are reflected in the National Framework on the Transition to an Open Research Environment document (2019), which has been formulated as the initial stride in establishing a National Action Plan for the shift to an open research environment in Ireland.

Conclusion

Ireland is in a pivotal position coming out of the pandemic, where pedagogical expectations in the post-pandemic teaching world have potentially not been

consolidated or communicated from students and institutions to teaching staff. Perceptions of OER still impede its widespread adoption, with genuine concerns regarding its reliability, relevance, and sustainability. Furthermore, the findings of this study have underscored the need for substantial support from teaching staff in this domain to cultivate or sustain an OER-enabled teaching approach. While a national policy would permit individual institutions the autonomy to devise a curriculum best aligned with their mission and strategy, the outcomes of this study imply a demand for hands-on and practical support, training, and guidance.

Students' perspectives on this matter would add tremendous value to the conversation. One participant stated, "the BEST OERs are the ones you get your students to make!". Indeed, another participant addressed the possibility of using students to create OER in areas where relevant OERs are difficult to find or non-existent. Perhaps this is an area that needs to be developed to foster change culture in open education at the student level. Salt Lake Community College employed student interns as OER advocates with the duty of creating an OER training guide (Scott and Hughes, 2022). Similarly, Connecticut College hired a student assistant to participate in communicating with stakeholders about the benefits of OER to the college community (McCaffrey, 2022). Additionally, the City University of New York created an Open Pedagogy Fellowship for graduate students who were teaching as adjuncts in undergraduate classes and challenged them to implement OER into their field and syllabi (Smith-Cruz and Bakaitis, 2022). Perhaps collaboration between library faculty and students could be the first step in embracing a systemic change for OER culture within an institution. Further research into OER and these particular stakeholders may lead to positive and realistic initiatives to drive from the ground.

This research sought to answer the question: to what extent, if any, has COVID-19 altered the perceptions of Open Educational Resources (OER) by teaching staff in higher education in Ireland? The results of this research have found that the shift to Emergency Remote Learning has done little to eradicate the perceived barriers to OER, rather it has elicited new concerns about the effects of Open Education on traditional teaching methods.

In exploring the barriers and benefits of OER by teaching staff, it was determined that the resource is perceived as a welcome addition of supportive material by academics and that most of the benefits discussed relate to the accessibility and cost-effective avenues to learning materials that they offer students. Most of the concerns pertaining to the barriers of implementation relate to change culture, such as the imbalanced work/reward structure that is currently in place, or the need for academics to embrace participation in communities of practice. Predominantly, there was recognition by participants of this survey that support for OER needed to come from the top to enable an OER culture in their institution.

This research has also confirmed that awareness levels of Open Access policies, OER policies, the copyright status of published work, and the suitability of institutional repositories for sharing OER are generally very low. Additionally, the level of support an individual has in their institution to sustain OER in their pedagogy is perceived to be quite low.

What this research has done is identified the pain points of adopting OER by teaching staff in HEIs, which is ultimately the first step in implementing a strategic plan

to facilitate an OER culture within an institution. Each institution is unique in the challenges it faces and varies with the experiences of teaching staff with OER already. However, common practical problems include overworked teaching staff whose priority is teaching, not creating, and misconceptions of the positive implications of open education. As previously stated, teaching staff are not the only stakeholders or contributors to promoting an OER culture within an institution. As such, collaboration across faculty, with library and student involvement, has the potential to foster an ecosystem for creating and sharing such resources.

References

- Allen, I. E., and Seaman, J. (2016) 'Opening the Textbook: Educational Resources in U.S. Higher Education, 2015-16', Babson Survey Research Group [online]. Available at: <https://onlinelearningsurvey.com/reports/openingthetextbook2016.pdf> (accessed 02 July 2022).
- Anderson, Y. and McCauley, C. (2022) 'How the Covid-19 Pandemic Accelerated an E-book Crisis and the #ebooksos Campaign for Reform', *Insights* 35(13). DOI: <http://doi.org/10.1629/uksg.586>
- Appiah, J., Essel, H., and Amankwa, K., (2020) 'An Evocative Appraisal of the Awareness, Attitude and Utilisation of Open Educational Resources at Kumasi Technical University', *Library Philosophy and Practice*, 3838 [online]. Available at: <https://digitalcommons.unl.edu/libphilprac/3838> (accessed 22 July 2022).
- Bacon, K. and Peacock, J. (2021) 'Sudden challenges in teaching ecology and aligned disciplines during a global pandemic: Reflections on the rapid move online and perspectives on moving forward', *Ecology and Evolution*, 11(8), pp.3551-3558.
- Biswas-Diener, R., and Jhangiani, R. S. (2017) *Open: The Philosophy and Practices that are Revolutionizing Education and Science*. London, Ubiquity Press. DOI: <https://doi.org/10.5334/bbc>.
- Bliss, T.J., and Smith, M. (2017) 'A Brief History of Open Educational Resources', in Jhangiani, R. S. and Biswas-Diener, R. (eds.) *Open: The Philosophy and Practices that are Revolutionizing Education and Science*. London, Ubiquity Press, pp. 9-27. DOI: <https://doi.org/10.5334/bbc.b>
- Carbery, A., Fallon, H., Higgins, M., Kennedy, E., Lawton, A., and McCauley, C. (2020) 'Irish Libraries and COVID-19: First Reflections', *Insights* 33 (1) [online]. Available at: <http://doi.org/10.1629/uksg.522> (accessed 24 April 2022).
- Creative Commons (no date) *OER* [online]. Available at: <https://creativecommons.org/about/programareas/education-oer/education-oer-resources/> (accessed 02 July 2022).
- Cronin, C. (2017) 'Openness and Praxis: Exploring the Use of Open Educational Practices in Higher Education', *The International Review of Research in Open and Distributed Learning*, 18(5). DOI:

10.19173/irrodl.v18i5.3096.

Cronin, C. (2018) 'Openness and praxis: A situated study of academic staff meaning-making and decision-making with respect to openness and use of open educational practices in higher education' (doctoral thesis), *ARAN – Access to Research at NUI Galway* [online]. Available at: <https://aran.library.nuigalway.ie/handle/10379/7276> (accessed 24 April 2022).

Cronin, C. (2019) 'Open education: Design and policy considerations', in Beetham, H. and Sharpe, R. (eds.), *Rethinking pedagogy for a digital age: Principles and practices of design*. Routledge.

Coyne, A. and Alfis, R. (2021) 'Open Educational Resource Policy Considerations and Recommendations: Arguments for Library Involvement', *Irish Journal of Academic Practice*. 9(2), pp. 1-17. DOI: <https://doi.org/10.21427/X4Q4-FX43>

Coyne, A. and Fitzpatrick, A. (2021) 'A Case for Open Educational Resources (OER) for Liberation: Leveraging Librarians and Library Skills', *Other*, 5, pp. 1-20 [online]. Available at: <https://arrow.tudublin.ie/liboth/5> (accessed 24 April 2022).

De Jong, M. and Will, N. (2022) 'An Institutional OER Policy as a Basis for Systemic Change in the Adoption of Open Education', *Open Education Week*, [video]. Available at: <https://connect.oeglobal.org/t/an-institutional-oer-policy-as-a-basis-for-systemic-change-in-the-adoption-of-open-education/3822> (accessed 02 July 2022).

Havemann, L. and Roberts, V. (2021) 'Pivoting Open? Pandemic Pedagogy and the Search for Openness in the Viral Learning Environment', *Journal of Interactive Media in Education*, 27(1), pp. 1-11. DOI: <http://doi.org/10.5334/jime.676>

Hughes, J. and Scott, A. (2022) 'Developing Student OER Leaders: Student Advocacy and Outreach Through Open Pedagogy', in Cullen, M., and Dill, E. (eds.) *Intersections of Open Educational Resources and Information Literacy*. Chicago, Association of College and Research Libraries, pp.267282. Available at: https://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/booksanddigitalresources/digital/9_780838936740_PIL79_OA.pdf (accessed 24 August 2022).

- Kanwar, A (2021) 'Sustainable Higher Education in a Post-COVID World', *Philippine Higher Education Forum Virtual Event*. Available at: <http://hdl.handle.net/11599/3880>. (accessed on 22 February 2022).
- Knox, L. (2022) A Best-Selling Textbook Is Now Free, *Inside Higher Ed* [online]. Available at: <https://www.insidehighered.com/news/2022/08/11/popular-chemistry-text-books-new-edition-will-befree#.YvUAiKJmkFU.link> (Accessed 15 August 2022).
- Lane, A. (2009) 'The impact of openness on bridging educational digital divides' *The International Review of Research in Open and Distance Learning*, 10(5), pp. 1-12. DOI: <https://doi.org/10.19173/irrodl.v10i5.637>
- Luo, T., Hostetler, K., Freeman, C. and Stefaniak, J. (2020) 'The power of open: benefits, barriers, and strategies for integration of open educational resources', *Open Learning: The Journal of Open, Distance and e-Learning*, 35(2), pp.140-158. DOI: <https://doi.org/10.1080/02680513.2019.1677222>
- McAvinia, C. and Maguire, T. (2011) 'Evaluating the National Digital Learning Repository (NDLR): New Models Of Communities Of Practice', *AISHE-J*, 3(1) [online]. Available at: <https://ojs.aishe.org/index.php/aishe-j/article/view/39> (Accessed 16 July 2022).
- McCaffrey, A. (2022) 'Fostering OER Student Champions Through Hiring Practices and Collaborative Projects', in Cullen, M. and Dill, E., (eds.) *Intersections of Open Educational Resources and Information Literacy*. Chicago, Association of College and Research Libraries, pp. 283-301. Available at: https://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/books/anddigitalresources/digital/9_780838936740_PIL79_OA.pdf (accessed 24 August 2022).
- National Forum for the Enhancement of Teaching and Learning in Higher Education (2015) 'Learning resources and open access in higher education institutions in Ireland', *Teaching and Learning* [online]. Available at: <https://hub.teachingandlearning.ie/resource/learning-resources-and-open-access-in-higher-education-institutions-in-ireland/> (Accessed 21 August 2022).
- National Forum for the Enhancement of Teaching and Learning in Higher Education (2015) 'Teaching and Learning in Irish Higher Education: A roadmap for enhancement in a digital world 2015-2017', *Teaching and Learning* [online]. Available at: <https://www.teachingandlearning.ie/publication/teaching-and-learning-in-iris>

h-higher-education-a-roadmap-for-enhancement-in-a-digital-world-2015-2017 (Accessed 02 July 2022).

National Forum for the Enhancement of Teaching and Learning in Higher Education (2018) 'Guide to Developing Enabling Policies for Digital Teaching and Learning', *Teaching and Learning* [online]. Available at: <https://hub.teachingandlearning.ie/resource/guide-to-developing-enabling-policies-for-digital-and-open-teaching-and-learning/> (Accessed 02 July 2022).

National Forum for the Enhancement of Teaching and Learning in Higher Education (2018) 'A Review of the Existing Higher Education Policy Landscape for Digital Teaching and Learning in Ireland', *Teaching and Learning* [online]. Available at: <https://hub.teachingandlearning.ie/resource/areview-of-the-existing-higher-education-policy-landscape-for-digital-teaching-and-learning-in-ireland/> (Accessed 02 July 2022).

Nwesri, A. (2019) 'Survey on Academic Staff Awareness of Open Educational Resources', *Tripoli University Bulletin*, 21(3) [online]. Available at: <http://dspace.zu.edu.ly/xmlui/handle/1/938> (Accessed 08 July 2022).

OER4Covid, 2020. *OER4COVID Initiative* [online]. Available at: <https://oer4covid.oeru.org/about/> (Accessed 24 April 2022).

OER Commons, (2022) *OER Commons* [online]. Available at: <https://www.oercommons.org/oer-101> (Accessed 24 April 2022).

Ogunbodede, K.F., Nwachokor, I.M. & Aminikpo, R.N. (2021) 'Awareness and use of Open Educational Resources by Academic Staff of Federal College of Education Technical Asaba, Delta State, Nigeria', *Rivers State University Journal of Education*. 24(1), pp. 144-153.

Orzech, M. (2021) 'Planning, Implementing, and Assessing an OER Faculty Learning Community: A Facilitator's Lens' *The Open/Technology in Education, Society, and Scholarship Association Journal*, 1(1), pp. 1-13. DOI: <https://doi.org/10.18357/otessaj.2021.1.1.6>

Otto, D. (2019) 'Adoption and Diffusion of Open Educational Resources (OER) in Education' *The International Review of Research in Open and Distributed Learning*, 20(5), pp. 122-140. DOI: <https://10.19173/irrodl.v20i5.4472>

Patel, K. J., Prakash, K., and Parekh, Y. R. (2021) 'Open Educational Resources: An Overview', *Towards Excellence*. 13(2), pp. 295-306 [online]. Available at: <https://hrdc.gujaratuniversity.ac.in/Uploads/EJournalDetail/30/1046/24.pdf> (accessed 24 April 2022).

- Ramsingh, D. (2021) 'Open Educational Resources: Opportunities, Issues and Challenges From a Florida Perspective' *Caribbean Library Journal*, 5, pp. 22-36.
- Reed, P. (2012) 'Awareness, attitudes and participation of teaching staff towards the open content movement in one university', *Research in Learning Technology*, 20. DOI: <https://doi.org/10.3402/rlt.v20i0.18520>
- Rimmer, W. (2020) 'Responding to Coronavirus with Open Educational Resources', *International Journal of TESOL Studies*, 2(2), pp. 17-31. DOI: <https://doi.org/10.46451/ijts.2020.09.03>
- Risquez, A. and McAvinia, C. (2018) 'The VLE versus Open Education', *Irish Journal of Technology Enhanced Learning*, 3(2), pp. 86-93 [online]. Available at: <https://journal.ilta.ie/index.php/telji/article/view/47> (accessed 24 April 2022).
- Risquez, A., McAvinia, C., Desmond, Y., Bruen, C., Ryan, D., & Coughlan, A. (2020) 'Towards a Devolved Model of Management of OER? The Case of the Irish Higher Education Sector', *The International Review of Research in Open and Distributed Learning*, 21(1), pp. 99–111. DOI: <https://doi.org/10.19173/irrodl.v20i5.4545>
- Rolfe, V. (2012) 'Open educational resources: Staf attitudes and awareness', *Research in Learning Technology*, 20 [online]. Available at: <https://journal.alt.ac.uk/index.php/rlt/article/view/1222> (accessed 02 July 2022).
- Seibert, H., Miles, R. and Geuther, C. (2019) 'Navigating 21st-Century Digital Scholarship: Open Educational Resources (OERs), Creative Commons, Copyright, and Library Vendor Licenses', *The Serials Librarian*, 76(1-4), pp. 103-109. DOI: <https://doi.org/10.1080/0361526X.2019.1589893>
- Smith-Cruz, S. and Bakaitis, E. (2022) 'Breaking Open: Defining a Student-Centered Pedagogy', in Cullen, M. and Dill, E. (eds.) *Intersections of Open Educational Resources and Information Literacy*. Chicago, Association of College and Research Libraries, pp.321-342. Available at: https://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/books_anddigitalresources/digital/9_780838936740_PIL79_OA.pdf (accessed 24 August 2022).
- Stracke, C., Downes, S., Conole, G., Burgos, D. and Nascimbeni, F. (2019) 'Are MOOCs Open Educational Resources? A literature review on history,

- definitions and typologies of OER and MOOCs', *Open Praxis*, 11(4), pp. 331-341. DOI: <http://doi.org/10.5944/openpraxis.11.4.1010>
- UNESCO (2019) *Recommendation on Open Educational Resources (OER)* [online]. Available at: <https://unesdoc.unesco.org/ark:/48223/pf0000373755/PDF/373755eng.pdf.multi.page=3> (accessed 24 April 2022).
- UNESCO (2020) *Guidance on Open Educational Practices during COVID-19 pandemic* [online]. Available at: <https://iite.unesco.org/publications/guidance-on-open-educational-practices-during-covid-19-pandemic/> (accessed 02 July 2022).
- UNESCO (2020) *Call for Joint Action: Supporting Learning and Knowledge Sharing through Open Educational Resources (OER)* [online]. Available at: https://en.unesco.org/sites/default/files/covid19_joint_oer_call_en.pdf (accessed 02 July 2022).
- UNESCO (2022) *OER Dynamic Coalition* [online]. Available at: <https://www.unesco.org/en/communication-information/open-solutions/open-educationalresources/oer-dynamic-coalition> (accessed 24 April 2022).
- Wals, A. (2015) 'Open and Editable: Exploring Library Engagement in Open Educational Resource Adoption, Adaption and Authoring', *Virginia Libraries*, 61(1), pp. 23-31.
- Wiley, D., (no date). *Defining the "Open" in Open Content and Open Educational Resources* [online]. Available at: <http://opencontent.org/definition/> (Accessed 05 May 2022).
- Wiley, D., and Gurrell, S. (2009) 'A decade of development...', *Open Learning: The Journal of Open, Distance and e-Learning*, 24(1), pp. 11-21. DOI: <https://doi.org/10.1080/02680510802627746>
- Williamson, B., and Hogan, A. (2020) 'Commercialisation and privatisation in/of education in the context of Covid-19', *Education International*. Available at: https://issuu.com/educationinternational/docs/2020_eiresearch_gr_commercialisation_privatisation?fr=sZDJkYjE1ODA2MTQ (accessed 12 August 2022).
- Williamson, B. and Hogan, A. (2021) 'Pandemic Privatisation in Higher Education: Edtech and University Reform', *Education International*. Available at: https://issuu.com/educationinternational/docs/2021_eiresearch_gr_covid_19_commercialisation_digit?f=r=sNTdjNzI5MTkzMTM (accessed 12 August 2022).