Open Access Publishing

A quick guide for universities

What
is Open Access?

Why does Open
Access matter?

How to publish Open
Access?

Introduction

Over the last two decades, enabling Open Access has become a major objective for funders, universities, and research institutions alike. The reasons are multifold: stemming from peer pressure, improving university rankings, compliance reasons to fulfilling the moral obligation of disseminating research.

With Open Access publishing becoming mainstream, whether you are a novice or a seasoned academic professional, understanding the basics of Open Access is now critical. That's precisely what this guide is designed to achieve.

We cover the fundamental principles and practices of Open Access Publishing and address some of the most commonly asked questions related to the topic.

What is Open Access?

Open Access is the process of offering permanent and unrestricted access to academic and research output. The goal is to allow interested parties to view, download, and build upon the research for free and without any or minimal legal implications.

More exposure for your work

Your research can influence policy

Practitioners can apply your findings

Taxpayers get value for money

Higher citation rates

More chances to earn from your expertise

Researchers worldwide get access

Compliant with grant rules

Danny Kingsley & Sarah Brown **Source**

The benefits Open Access

The characteristics of
Open Access academic output:

✦ The content may or may not be peer-reviewed or published; also covers unpublished grey literature such as audio/visual media, conference proceedings, preprints, among other things.

✦ There are no access barriers to the content apart from a working internet connection.

✦ There are minimal restrictions with regard to reproduction and reuse.

✦ The content can be accessed by anyone across the world in its entirety.

Permanent, unrestricted access

Accelerate scientifc discovery

Democratize scientific knowledge

Why does Open Access matter?

Typically when your faculty members or researchers publish articles in journals, the ownership lies with the publishers. Neither the institution nor the author can claim ownership of the same. Suppose the institution wants to host a copy of the article, they will have to pay a subscription fee for the journal.

Cited more

1.6x more citations of OA articles than non-OA articles across all sujects

More Downloads

4x more downloads of OA articles than non OA articles

Greater impact

2.5x more Altmetric attention. OA articles attracted 1.9x more news mentions & 1.2x more policy mentions

Open Access articles have higher visibility and impact

Simply put, the insights gleaned from research funded and facilitated by universities and public bodies are getting locked behind paywalls. Because of the complexity associated with copyrights and tracking embargo periods, these papers end up staying inaccessible for long periods.

Due to these challenges, it gets harder for new researchers, students, and faculty members to use the insights gleaned or even build on the research. It is essentially slowing down scientific progress and knowledge sharing.

This is why the Open Access movement has gained prominence over the last two decades. By shattering the access barriers associated with research sharing, **the campaign hopes to:**

- Maximize research visibility and impact and also boost the citation count.
- Help researchers own the copyright to their work with a CC-BY license and ensure people worldwide can access research for free.
- Eliminate delays so that new researchers can build on the insights gleaned and take it further forward.
- Make sure the data and insights are accessible to policymakers and other decision-makers.
- Increase the ROI of research by ensuring the research output and insights are widely available.
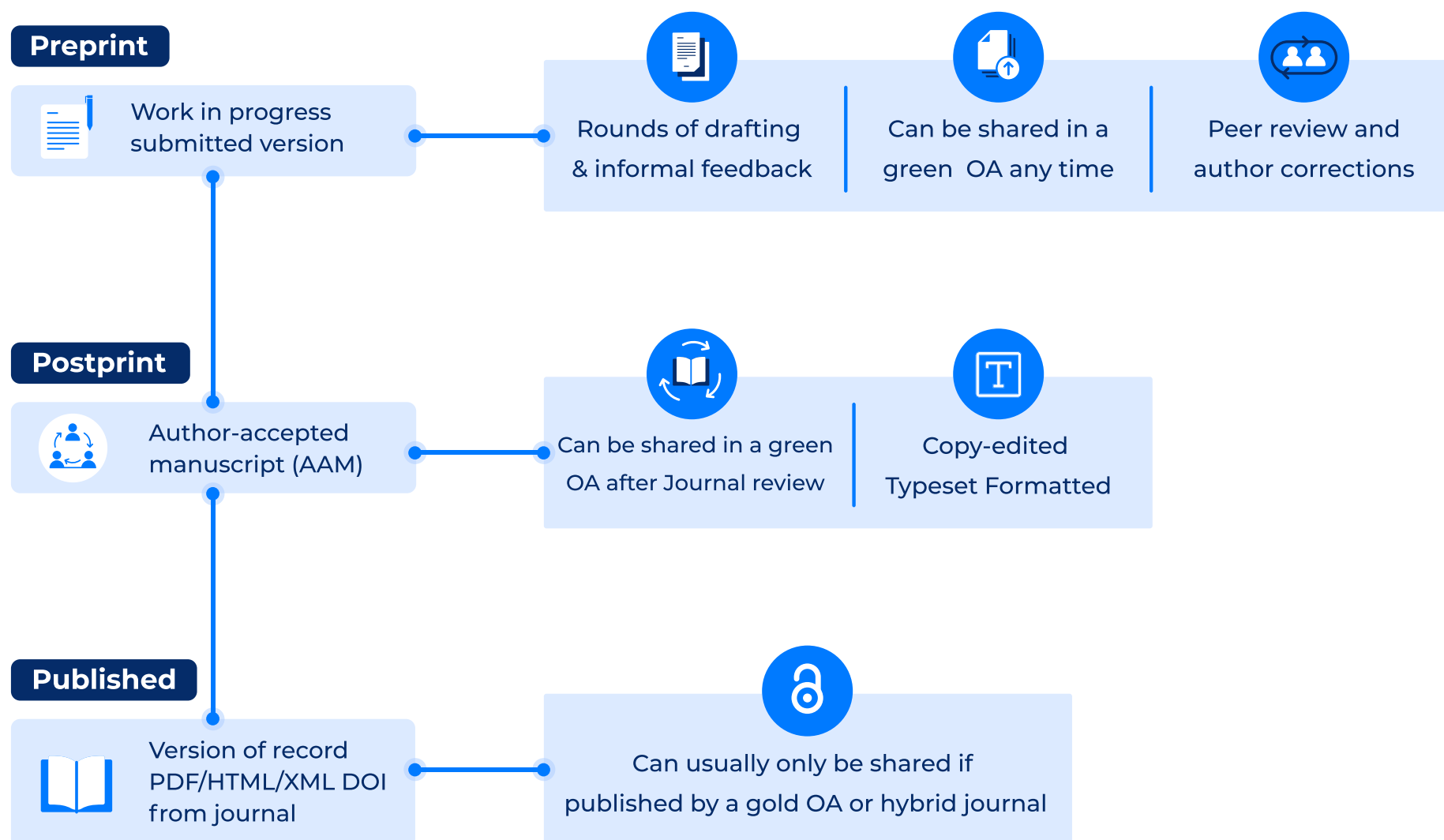
Publishers own non-OA articles

Gained prominence over last two decades

OA articles have a higher impact

How to publish Open Access?

Copyright regulations mean it is not always possible to make the final published version of your manuscript freely accessible. But the good news is that you can still make other versions of the manuscript widely available.

The key here is to make sure that you are aware of the different manuscript versions and the various Open Access publishing models at your disposal.

Preprint

Work in progress submitted version

Rounds of drafting & informal feedback

Can be shared in a green OA any time

Peer review and author corrections

Postprint

Author-accepted manuscript (AAM)

Can be shared in a green OA after Journal review

Copy-edited Typeset Formatted

Published

Version of record PDF/HTML/XML DOI from journal

Can usually only be shared if published by a gold OA or hybrid journal

Source

Typical publishing workflow for an academic journal article

Different manuscript versions

Pre-print:

It is the original version of the manuscript submitted to the publisher. While it is common for authors to share the document with peers for validation and minor edits, it wouldn't have gone through formal peer-review, editing, or formatting.

Post-print:

The version of the manuscript has gone through a formal peer-review process, and the author has made revisions based on the feedback received. It is otherwise called Accepted Author Manuscript (AMM).

Published:

This is the post-processed version of the manuscript that is professionally edited and typeset by the publisher.

Now let's look at the available Open Access publishing models.
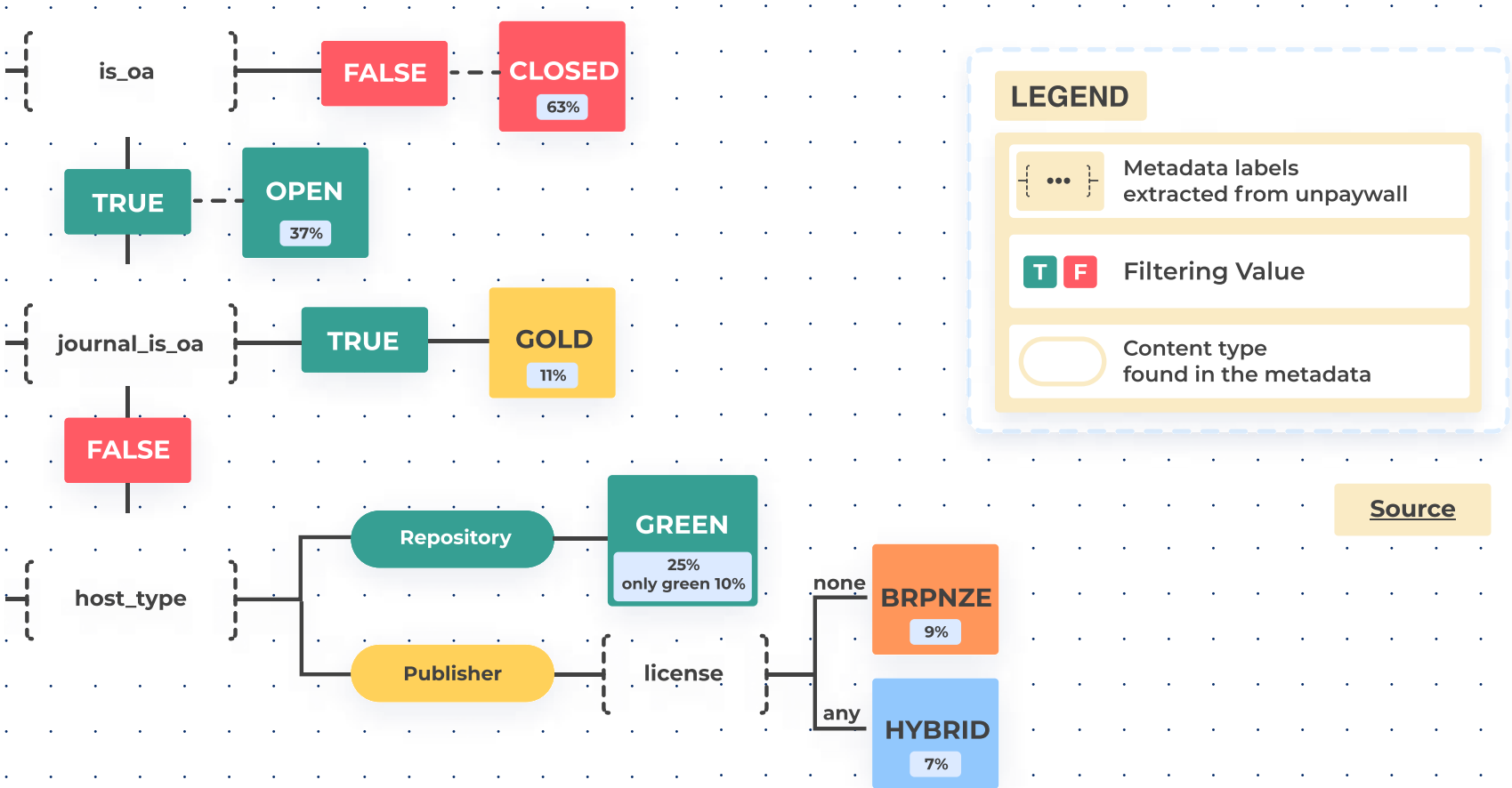
Gold Open Access

In this model, the author must pay the publisher an Article Processing Charge (APC) while submitting the manuscript. Sometimes the author's affiliated institution or a funding body may pay this charge on their behalf. But unlike traditional journals, the reader won't be levied any sum to access or download the publication.

Green Open Access

arXiv

This model allows authors the freedom to submit and archive a version of their manuscript in a repository. The repository could be a discipline-specific one such as arXiv or the institution's repository that the author is affiliated to. Readers will access and download the entire content without paying any charges. If the manuscript has been published in a journal, the author will have to wait till the embargo period is over to archive it in the repository.

Open Access labeling methodology

Diamond Open Access

This model involves the publishing of articles in journals that are entirely free. Neither the authors nor the readers have to pay any charges. Typically, these journals are community or institution-driven initiatives where they take the help of volunteers to process and put together the journal.

Delayed Open Access

It involves the publisher making the manuscript freely accessible to everyone on their website after the initial embargo period. Readers will be able to download the article without paying charges.

Hybrid Open Access

This model is prevalent with traditional publishers where the authors have the option to make their individual articles (not the entire journal) immediately Open Access by paying an Article Publication Charge. The critical thing to note here is that once you pay the charge, you will get the article's copyright. The processing charge tends to be higher than that of Gold Open Access.

Bronze Open Access

This model primarily refers to the practice of making articles widely available without having any open license attached to them.

Gratis Open Access

This model refers to the practice of publishers optionally making a paper free to read at no charge to the author — usually for marketing and promotional activities. The Gratis Open Access may not be permanent. This is not considered as 'true' Open Access.
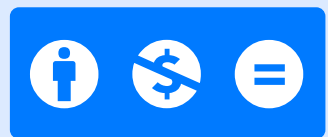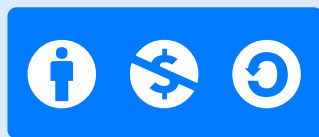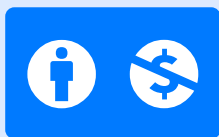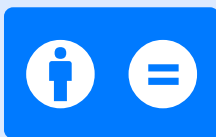
Libre Open Access

This is a blanket term for 'true' Open Access. The paper is made available under an open license, allowing it to be shared and reused, depending on which license is used.

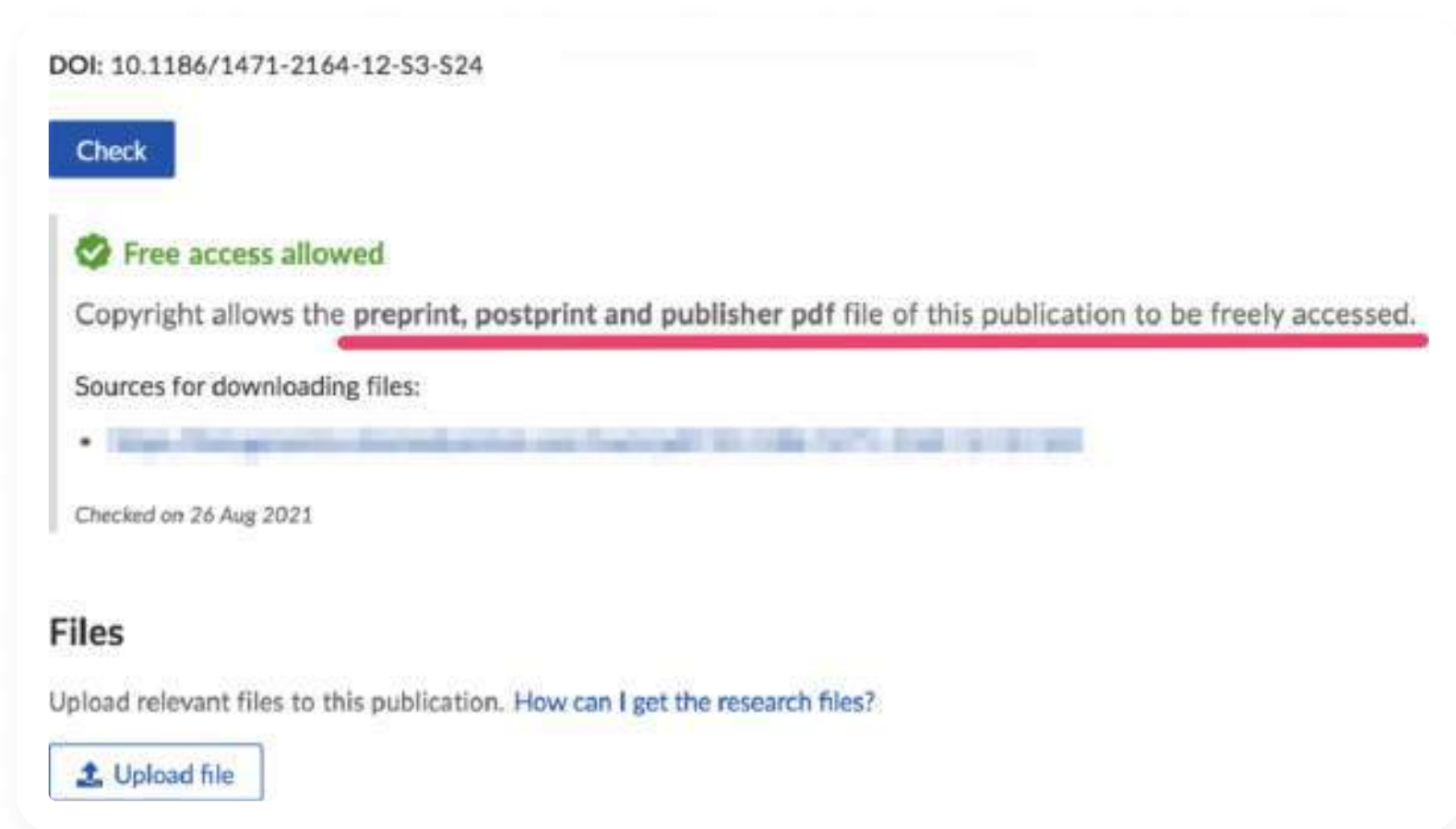# Talking about licenses, let's move on to Creative Commons:

Creative Commons is a nonprofit organization that aims to provide a licensing framework for everyone looking to share their creative and academic work for free. It ensures that people can freely download, reuse, distribute, and build upon your work with proper attribution.

Source

Most Free

Leasy Free

1. **CC BY :** You must credit the creator.
2. **CC BY-SA :** You must credit the creator, and any adaptations you build must be shared under the same terms.
3. **CC BY-ND :** You must credit the creator, but no derivatives or adaptations of the work are permitted.
4. **CC BY-NC :** You must credit the creator, and the work should only be used for non-commercial purposes.
5. **CC BY-NC-SA :** You must credit the creator. The work should only be used for non-commercial purposes. Any new adaptations you create must be shared under the same terms.
6. **CC BY-NC-ND :** You must credit the creator, but the work cannot be used commercially. Neither are you allowed to make derivatives or adaptations of the work.

What is Open Access Archiving?

Open Access archiving is the process of storing articles in digital repositories and making them freely accessible without any financial barriers. While some publishers allow you to archive the published version of the article, others only let you archive the preprint version of the article.

The potential impact of archiving your OA journal articles:

✦ Long-term availability and accessibility

✦ Minimize or eliminate the risk of digital decay

✦ Protect knowledge from disasters and calamities

✦ Drive visibility and research impact

✦ Provide unrestricted access to knowledge to everyone with an internet connection

Types of Archives

There are three options for archiving your Open Access publications:

Dark Archive

A dark archive is private, digital storage that is not accessible to the public (online readers). These serve as failsafe repositories for storing and preserving published journal articles. Popular and commonly used dark archives include CLOCKSS, LOCKSS, Portico, etc.

Light Archive

A light archive is publicly and openly accessible to all digital readers. Public archives provide you with various options for storing your scholarly articles, including institutional or university-run libraries, preprint servers, open archive databases, and more. These repositories could be subject-specific such as Cogprints (Psychology, Neuroscience, etc.), Engrxiv (Engineering), and RePEc (Economics).

It also includes repositories built by universities and research institutions to host their research corpus and other forms of scholarly output. **Examples:** IIT Madras Repository, eScholarship by the University of California, etc.

Dim Archive

This model combines the previous two models. Some scholarly content is restricted to certain organizational custodians, but the rest is available to others, typically to a research community with a large readership. Dim Archives cannot be accessed by all internet users but can be released publicly if required or requested. The archival method is generally used when a journal needs to be preserved with limited Access.
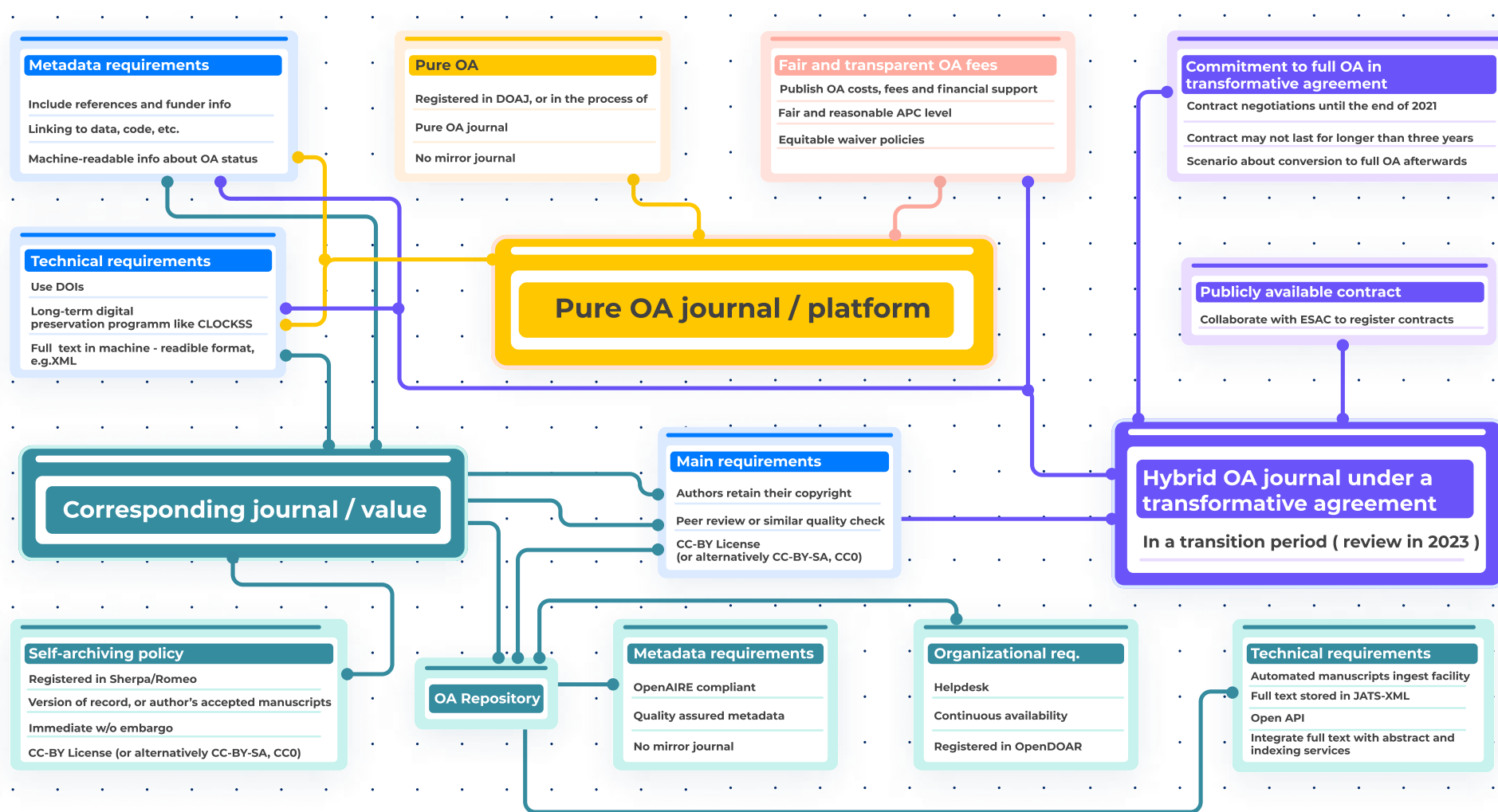
What is Plan S?

Launched by cOAlition S, Plan S is an initiative that aims to make scholarly output resulting from public-funded research fully Open Access immediately. It requires that from 2021, all articles arising from public-funded research should be published in Open Access compliant journals and repositories immediately without any embargos.

Currently, the initiative is backed by 26 organizations, including the likes of Science Europe, UK Research and Innovation, World Health Organization, European Union, among others.

You can achieve Plan S compliance by:

✦ Contributing your articles to Open Access journals or platforms
✦ Uploading the article in full on an Open Access Repository
✦ Publishing your article or paper in a journal under a transformative agreement

Requirements for plan S compliance in one page

Metadata requirements
Include references and funder info
Linking to data, code, etc.
Machine-readable info about OA status

Pure OA
Registered in DOAJ, or in the process of
Pure OA journal
No mirror journal

Fair and transparent OA fees
Publish OA costs, fees and financial support
Fair and reasonable APC level
Equitable waiver policies

Commitment to full OA in transformative agreement
Contract negotiations until the end of 2021
Contract may not last for longer than three years
Scenario about conversion to full OA afterwards

Technical requirements
Use DOIs
Long-term digital preservation programm like CLOCKSS
Full text in machine - readible format, e.g.XML

Pure OA journal / platform

Publicly available contract
Collaborate with ESAC to register contracts

Corresponding journal / value

Main requirements
Authors retain their copyright
Peer review or similar quality check
CC-BY License (or alternatively CC-BY-SA, CC0)

Hybrid OA journal under a transformative agreement
In a transition period (review in 2023)

Self-archiving policy
Registered in Sherpa/Romeo
Version of record, or author's accepted manuscripts
Immediate w/o embargo
CC-BY License (or alternatively CC-BY-SA, CC0)

OA Repository

Metadata requirements
OpenAIRE compliant
Quality assured metadata
No mirror journal

Organizational req.
Helpdesk
Continuous availability
Registered in OpenDOAR

Technical requirements
Automated manuscripts ingest facility
Full text stored in JATS-XML
Open API
Integrate full text with abstract and indexing services

● Requirement for all
● Requirement for pure + hybrid OA
● Requirement for pure + OA
● Requirement for OA repository
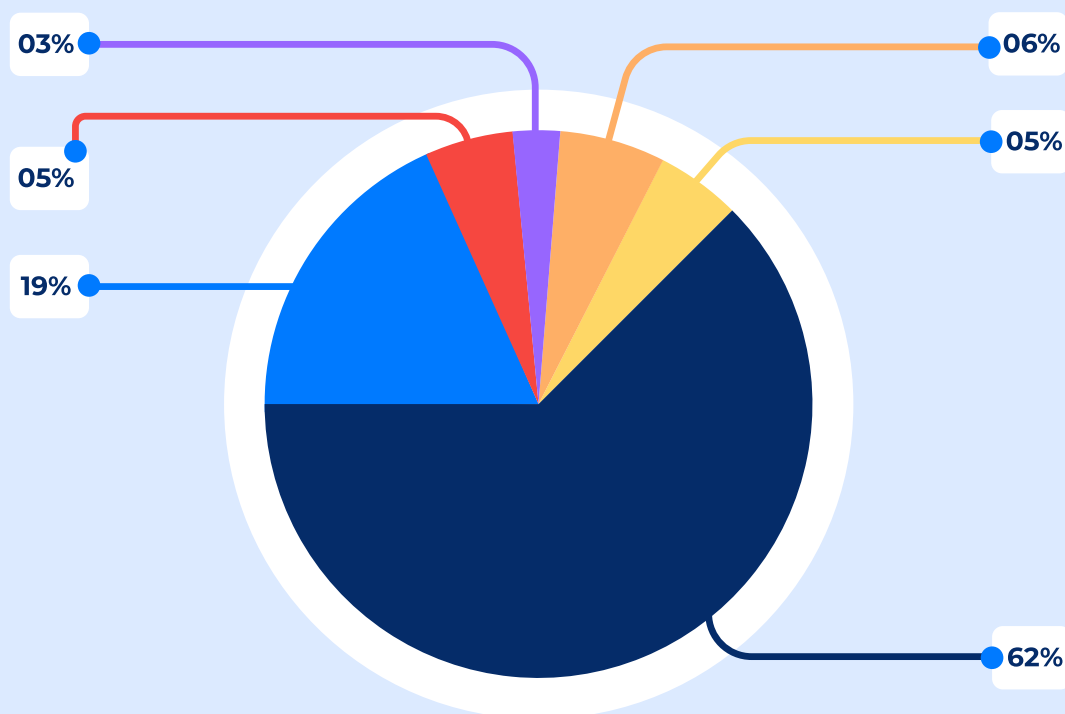● Requirement for hybrid OA

Source Philipp Zumstein

What is an Open Access Mandate and should you have one?

An Open Access mandate refers to a policy adopted by a funder, institution, or the government which necessitates researchers to make their research articles public. This can be done via two routes: Green Open Access or Gold Open Access.
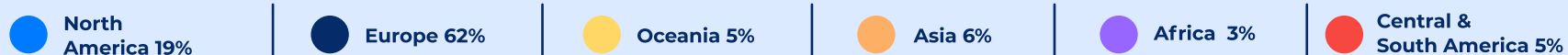
Universities that have adopted Open Access mandates include Harvard University (the first to do so), MIT, ETH Zurich, University of Liege, and University College London. Harvard University has also developed a model policy language document for institutions looking to implement an open access policy for their faculty.
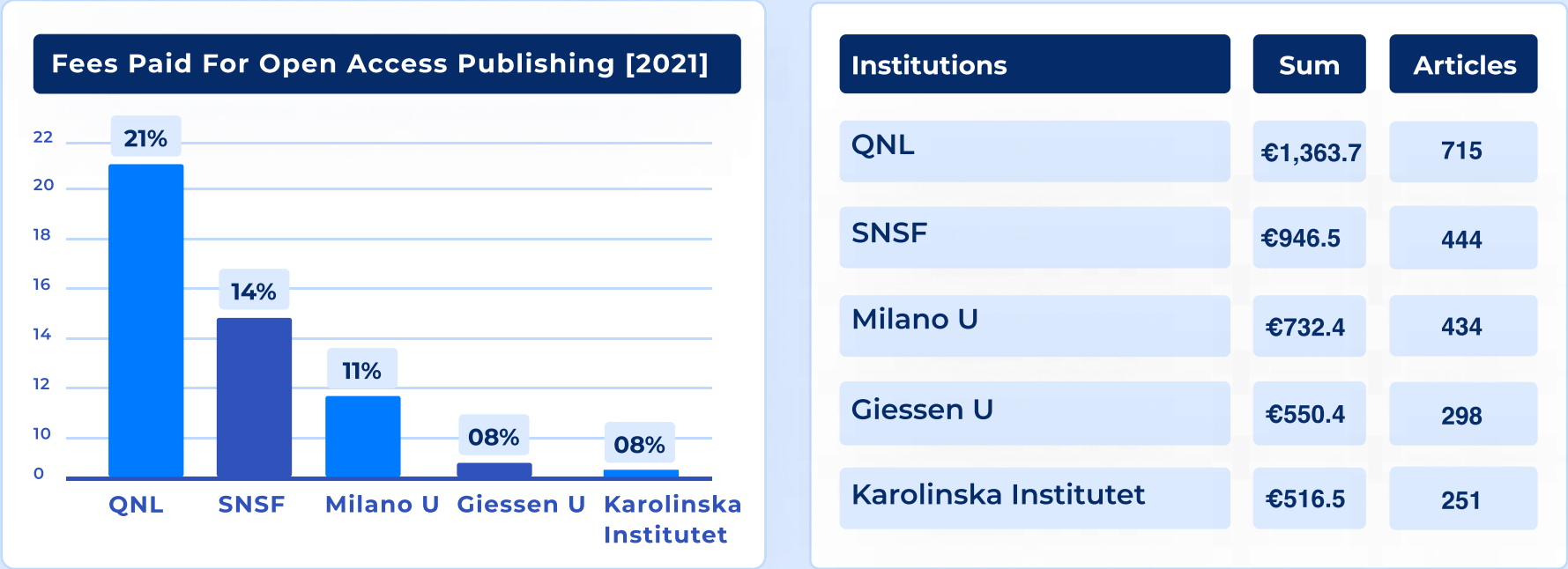
Open Acess mandates worldwide distribution

03%
06%
05%
05%
19%
62%

Alma Swan, PASTEUR 40A | Source

● North America 19% | ● Europe 62% | ● Oceania 5% | ● Asia 6% | ● Africa 3% | ● Central & South America 5%

Fees Paid For Open Access Publishing [2021]

Institutions	Sum	Articles
QNL	€1,363.7	715
SNSF	€946.5	444
Milano U	€732.4	434
Giessen U	€550.4	298
Karolinska Institutet	€516.5	251

QNL 21%
SNSF 14%
Milano U 11%
Giessen U 08%
Karolinska Institutet 08%

treemaps.intact-project.org   Source

Why are most
university mandates not mandates?

Many institutions do not force authors to make their publications and research output Open Access. They merely 'encourage' authors to do so. It is up to the author to comply with the mandate or not. Moreover, they have the choice to opt out by stating a reason.

The reason why institutions grapple with ensuring compliance is two-fold. The process is labor-intensive and segregated at the moment. Plus, there is no strong incentive for researchers to comply with institutional mandates. For example, mandates issued by funders tend to be more potent as they can stop research funding — a pretty strong incentive for compliance.

The struggle for compliance is more common in the U.S. than in Europe. Universities in Europe have made OA mandates an administrative function and "mandatory". In contrast, implementation in the U.S. is still more by faculty consensus and "encouraging".

Mandatory Open Access requires the immediate deposit of the author's preprint or final version of the publication in the institute's repository. This condition cannot be waived.

Surprisingly, evidence suggests that researchers favor policies that make it mandatory to self-archive publications in institutional repositories.

The challenges involved in implementing OA mandates

The benefits of OA mandates are numerous for both researchers and institutions.

However, as many institutions will attest, adopting OA mandates comes with its own set of challenges that can deter implementation and compliance.

Last year, the Coalition for Networked Information (CNI) held an executive roundtable titled "Rethinking Institutional Repository Strategies". The participating institutions revealed that implementing an OA policy requires a lot of institutional overhead.

Several scholarly communications librarians have reiterated this. Setting up an institutional repository, making it indexable, bearing APC costs, maintaining dedicated staff for OA mandates, and tracking compliance are cited as some of the reasons for this overhead.

Wellcome, the first research funder to introduce a mandatory open access policy, recently announced that it will be reviewing its open access policy to move to a full OA world and reduce associated costs.

The compliance with their policy is over 75%, which is pretty impressive. However, this has resulted in increased costs, primarily attributed to increased APCs.

Labour intensive

Lack of incentive

Compliance challenges

Slow adoption

Friction with researchers

Lack of trust

They reveal:

"In 2015–16, Wellcome spent £5.7 million delivering this policy, and we know from COAF data that 71% of APCs go to funding hybrid OA; articles which are published in a subscription journal but can be made OA on the payment of a fee.

Significantly, the COAF data also reveals that the average APC for a hybrid OA article (£2,209) is 34% higher than the average APC for an article in a fully OA journal (£1,644)."

They are consequently planning to do away with publication in hybrid OA journals and mandate publication in fully OA journals.
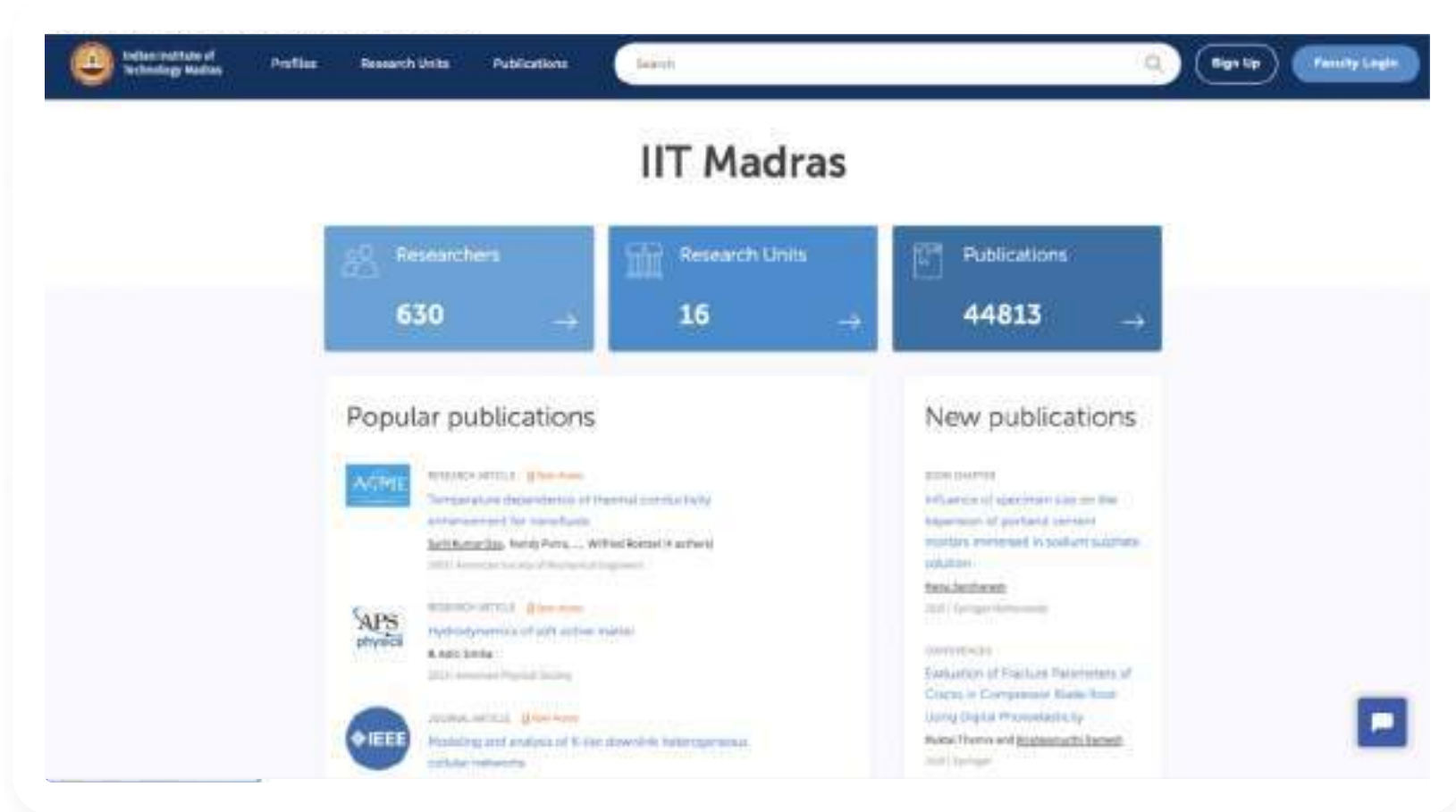
The same economic challenge faces institutions as well. APCs are high and eat into a significant portion of academic budgets. Add to that the complexity involved in motivating researchers to comply, allocating human resources to check associated metadata manually, tracking submissions, and making them indexable.

Whether or not your institution has an Open Access Mandate, creating an online repository makes meeting your Open Access goals much more straightforward. It is a great way to enable access, gain visibility, increase competitiveness and improve international standing.

Of course, there are constraints and challenges involved, such as securing the funding, hiring technical experts, dealing with complex workflows, and managing copyright issues. But it gets a lot easier when you have the right solution by your side.

The role of Institutional Repositories in promoting Open Access

Every top university out there has an Open Access institutional repository. Granted that it helps universities and educational institutions fulfill their fundamental obligation of disseminating knowledge, but that's not all. It plays a crucial role in boosting citations and downloads.

Offers greater control

You can assert greater control over a repository that your institution maintains. Institutions can decide everything from what can be uploaded, what format to be used, to the branding aspects of the repository website. It also reduces the power imbalance in the publishing industry, as institutions do not have to depend upon publishers to make their content widely available.

Acts a centralized platform

An Open Access institutional repository aggregates your institution's research corpus and grey literature in one place. It ensures that each piece of content is neatly categorized based on the author's name, co-contributors involved, content type, keywords, department, and other details. Any visitor will be able to find what they are looking for in minutes.

Makes it easier to meet Open Access Mandates

With universities setting up Open Access policies and the arrival of initiatives like Plan S, there is a greater push toward making public-funded research widely available. The best way to meet these requirements is to have an institutional repository.

Open up PDFs hidden behind paywalls

Many publishers allow authors to freely archive their publications in repositories of institutions they are affiliated with. So, suppose you have a repository solution that can track and identify embargo dates, determine what version can be made publicly available, and more. In that case, you will be able to open up publications locked behind paywalls with ease.

Consolidate research corpus

Enable Open Access

Maximize research visibility

How to promote Open Access in your institution?

Now that you have a fundamental understanding of Open Access, the next question is how do you promote it in your institution to get greater buy-in from all the stakeholders: deans, librarians, researchers, and students to the local community?

Reach out and support the local community

Work closely with schools and educational institutions in the vicinity to create Open Educational Resources for the local community. Assist local charities, museums, and galleries in digitizing their archives and making sure the local records and knowledge are safeguarded and available to be accessed publicly.

Reward top repository contributors

To encourage repository participation, you can tap into their competitive spirit and need for recognition by instituting monthly and yearly awards for top contributors. Recognize members who contributed the most manuscripts, who had the most downloads and citations, and so forth.

Set up an Open Access publishing fund

Open Access journals typically charge authors a specific fee for submissions. This fee may stop faculty and researchers from opting for OA publications. To avoid this situation, the institution can set up a dedicated OA publishing fund and bear it on behalf of researchers and faculty.

Make copyright detection as easy as possible

Faculty and researchers are often reluctant to deposit their manuscripts in institutional repositories because they are unsure about copyright rights. Get a repository solution that supports copyright detection to fix this problem. It enables your faculty or staff to find out exactly which version of a manuscript can be made freely available.

Join Open Access advocacy organizations

Join international Open Access advocacy organizations and consortiums such as SPARC and be at the forefront of furthering the Open Agenda. They offer a policy framework to structure your Open Access initiatives and support member institutions with research insights, direct campus visits, workshops, webcasts, and much more.

Make Open Access a part of campus activities

Allow the scholarly communication office to work closely with student and faculty liaisons to ensure Open Access is part of the curriculum and campus activities.

Share your repository content online

Send email alerts to community members each time a deposit is published. Alternatively, you can curate the best articles of a week and send them as part of the weekly newsletter. As for social media, share links to new deposits with a 2-line summary and relevant hashtags. Set up a dedicated handle for your repository, or use your library's official handle.

Get distinguished faculty to participate

An easy way to get over the initial hesitation is to get one or two distinguished faculty members from each department to participate in these Open Access initiatives. It will give you much-needed credibility and help you gain word-of-mouth traction.

Wrapping up

Hopefully, the guide has helped you get a fundamental understanding of Open Access principles. Now, it is time for you to start incorporating and implementing the various practices and strategies covered in the guide and work towards building a world where access to scientific knowledge is democratized.

Next Steps

If you are looking for a repository solution to complement your Open Access initiatives, check out Typeset's University Suite. It gets much easier to run an Open Access repository when hosted on Typeset. With its integrated writing and publishing tools, copyright detection technology, streamlined deposit and approval workflows, and search-friendly indexing, you will be able to manage and showcase your scholarly output seamlessly.

Book A Free Demo

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