Criteria for Inclusion in Directory of Open Access Journals: A Case of Malaysian Journals

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ABSTRACT

Since the release of the Budapest Open Access Initiative (BOAI) in 2002, open access has been developing for more than 20 years. As a distinct and comprehensive index of various open access journals from around the globe, the Directory of Open Access Journals (DOAJ) plays an important role in the global open access infrastructure. It is supported by an active community that is dedicated to making sure that everyone can freely access high-quality content. The DOAJ standards have emerged as the industry standard for open access publishing. While the number of indexed journals in DOAJ throughout Asia continues to grow rapidly, the number of open access journals that are indexed in DOAJ in Malaysia is relatively small, which means many editors of Malaysian journals are not very clear about DOAJ and its criteria for inclusion. This paper gives an overview of the DOAJ's history in the beginning. Next it focuses primarily on the applications and inclusion status of DOAJ in Southeast Asia, particularly for Malaysia as well as the global usage statistics of DOAJ. After the brief introduction, a set of DOAJ basic criteria newly updated in April 2023 regarding open access compliance, copyright & licensing, editorial, and business model are explained in detail. Meanwhile, the most frequently occurring questions during the application process of Malaysian journals are revealed and discussed in order to assist open access journals in Malaysia in better understanding the questions included in the application form.

Keywords: Open Access, Directory of Open Access Journals (DOAJ), Inclusion Criteria, Malaysian Journals

INTRODUCTION

The Directory of Open Access Journals (DOAJ) is one of the most internationally recognized open access journal databases with clear selection criteria and strict quality control measures.Journals included in DOAJ are considered to have high academic value. DOAJ is not limited by discipline, region, or language, and covers science and technology, medicine, social sciences, arts and humanities and other fields, with a wide range of coverage and journal diversity, which truly reflects the situation of open access journals worldwide. To date, the inclusion criteria for the DOAJ database have become an unofficial gold standard for evaluating open access journals.

DOAJ HISTORY

In December 2001, the Open Society Institute (OSI) convened an international symposium on open access in Budapest, Hungary, where they drafted and published the Budapest Open Access Initiative (BOAI). This initiative advocates for the development of open access on a global scale and promotes the use of the Internet for scientific exchange and the free dissemination of academic achievements. Following BOAI's publication, the idea of a directory of pure open access journals was proposed at the 2002 Nordic Conference on Scholarly Communication in Sweden. Lars Bjørnshauge, Head Librarian from Lund university at the time, undertook this task. DOAJ was subsequently founded on 12th of May 2003, with around 300 open access journals at the start (DOAJ, 2023). Lund University operated DOAJ until January 2013, when it was taken over by the Infrastructure Services for Open Access C.I.C (IS4OA) and has been in operation ever since. IS4OA is a community interest company registered in the UK with a branch in Denmark. As a non-profit community interest organization, DOAJ relies entirely on voluntary contributions from its supporters and is committed to being 100% independent, maintaining all of its major services and metadata for everyone, free of charge.

DOAJ has an advisory board and council whose members voluntarily perform their duties. Meanwhile, DOAJ is also supported by more than 100 voluntary editorial staff worldwide, and the volunteers provided 2500 hours of editorial effort in 2021 (DOAJ, 2023). Asides, DOAJ has 21 active ambassadors, who work with communities around the world. Ambassadors promote open access and best practices in their respective regions and help journal editors realize the value of standards in open access publishing; they boost DOAJ's profile and make the journals more appealing places to publish research.

DOAJ IN NUMBERS
By September 2023, DOAJ has included almost 20,000 open access journals, more than 13,000 of which do not charge any article processing fees (APCs), from 130 countries and covering 86 different languages, making it the largest open access journal database all around the world. In 2022, the number of total visits on DOAJ website is 11.5 million, and there will be 3.3 million visits during the period of January to September 2023. As of August 4, 2023, the top ten countries that visit DOAJ website most as shown in the following Table 1.

Table 1: Top 10 Countries Visited DOAJ Website Most

Country	Total visits
United States	2.1 million
Indonesia	1 million
United Kingdom	683k
China	682k
India	591k
Canada	398k
Philippines	387k
Australia	253k
Germany	245k
Mexico	216k

The official statistics from DOAJ demonstrate, in 2022, the number of applications that DOAJ

received from China was 127 and there were 73 journals were successfully indexed, which means acceptance rate is higher than 50%. Meanwhile, Table 2 shows the number of applications and the number of indexed journals in Southeast Asia in 2022. Among them, Indonesia has become the largest group of journals in the DOAJ platform. This is mainly due to the initiation of the DOAJ's Ambassador program from 2016 which aims to raise open access awareness and best publishing practice in regions that lack knowledge about DOAJ or open access publishing. So far the ambassador program covers 17 different countries and regions. The dramatic increase in DOAJ indexed open access journals from some countries such as China and Indonesia can be seen as the success of ambassador work (DOAJ, 2023). Besides, in recent years, an open access model that does not rely on APCs or subscription fees has emerged since the majority of Indonesian journals are anchored in universities and rely on institutional funding (Irawan et al., 2021). However, as shown in Table 2, the acceptance rate in Southeast Asia is generally only around 20%, which means there is an urgent need to control the journal quality in a stricter manner and clearly list the journal policies required.

Table 2: Journals Applications and Inclusion in Southeast Asia in 2022

Country	Number of Applications	Number of Indexed Journals
Indonesia	1979	361
Malaysia	64	8
Philippines	39	7
Singapore	36	9
Thailand	17	3
Viet Nam	11	3
Brunei	2	1
Cambodia	0	0
East Timor	0	0
Laos	0	0
Myanmar	0	0
In total	**2148**	**392**

As of the end of 2022, there are 93 Malaysian journals included in DOAJ. To clearly understand the overview of open access publishing in Malaysia, among them, this paper lists different journal parameters in statistics from the perspectives of subjects, languages, publication fees, copyrights, and DOAJ seals as Table 3 demonstrated.

Table 3: An Overview of 93 Malaysian Journals

Parameter	Number
Subject Classifications	16
Publication Languages	3（English, Malay-Macrolanguage, Arabic）
Without Fees	73
Authors Retains All Rights	40
With DOAJ Seal	0

DOAJ uses the Library Congress Classification system which currently contains 20 main subjects and 529 sub-subjects in the database. This paper only looked at the journal's distribution across main subjects. As Figure 1 shows, Malaysian journals cover 16 main subjects, with only four main subjects (i.e. History America, Military Science, Music and books on Music and Naval Science) still blank. Simultaneously, the volume of the open access journals included in DOAJ in the field of Auxiliary sciences of history, Bibliography, Library science, Information resource, Fine Arts and History (General) and history of Europe still stay relatively low level. This indicates an unbalanced development of open access in different disciplines.
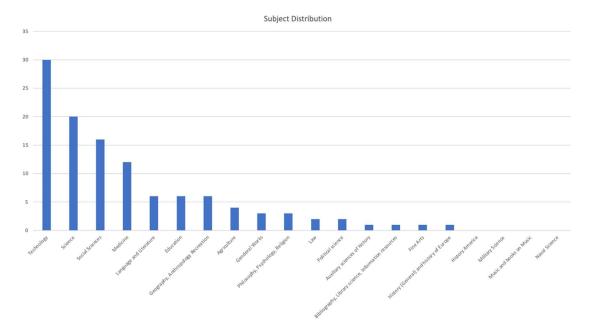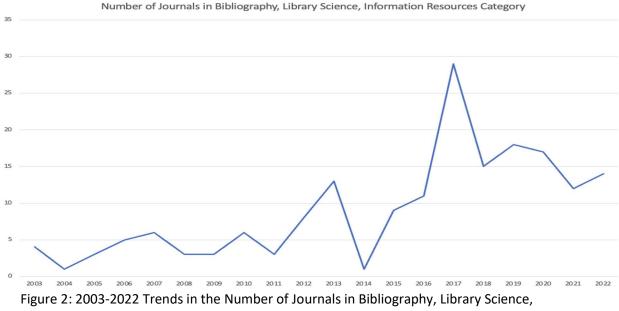

Figure 1: Subject Distribution among 93 Malaysian Journals

Considering the very small portion of open access journals in the Bibliography, Library science, Information resources category included in DOAJ, this paper further analyzes the inclusion of journals in this field by September 2023. The results show that there are 193 journals worldwide included in DOAJ, of which 176 journals are free of charge, 142 journal authors retain all rights, and 16 journals obtain the DOAJ seal. Besides, publishers' countries refer to the country or region where the journal publisher is located. Under this category, the largest number of publishers come from the United States (30), followed by Brazil (22) and then

Indonesia (14). However, only two publishers are from China and one publisher from Malaysia. The title of this Malaysian journal is Acta Informatica Malaysia, which has been indexed with DOAJ since 2018. Additionally, DOAJ accept journals of any publication languages, so the journals and their articles in different languages coexists on the DOAJ website, but English is still the dominant language, accounting for about 76.7% (148) The literature in Spanish (38), Portuguese (34), French (12) and Indonesian (12) is also relatively large. Some journals are published in more than one language. Furthermore, CC BY is the most commonly used license (86, accounting for around 45%), followed by CC BY-NC (37) and CC BY-NC-ND (35). And only two journals adopt the publisher's own license. In addition, one hundred and six journals employ double anonymous peer review, occupying around 65%.

According to Figure 2, the number of journals in the Bibliography, Library Science, Information Resources Category included in DOAJ shows an overall upward trend during the period from 2003 to 2022. The number of journals included reached the bottom in 2004 and 2014, but 2017 witnessed the peak, with 29 journals in this area being included by DOAJ.

Figure 2: 2003-2022 Trends in the Number of Journals in Bibliography, Library Science, Information Resources Category

DOAJ BASIC CRITERIA

High standards for journal inclusion have earned DOAJ recognition on a global scale. The well-known database Scopus introduced the open access indicator, if a journal is listed in the DOAJ, it would be marked an open access journal in Scopus (Susanne & Ian, 2015). In September 2022, the Committee on Publication Ethics, the DOAJ, the Open Access Scholarly Publishers Association, and the World Association of Medical Editors jointly published the latest principles of transparency and best practice in scholarly publishing, which was originally issued in 2013 (DOAJ, 2023). These concepts were mostly taken from the DOAJ journal inclusion standards (Olijhoek et al., 2015).

Based on the application form, DOAJ published a guide to applying on its official website, which can assist applicants in understanding how to answer the questions on the application form. It has been translated into 12 languages. There are four versions of this guide, and since 2021, they have each been updated annually, as indicated by the updated dates for each edition in Table 4. The most recent revision was made by DOAJ in April 2023. It shows the inclusion criteria are dynamic and can adapt to the maturing open access field.

Table 4: Changes for the Guide to Applying

Version	Changes	Updated time
1.3	The following points received more clarification: endogeny, displaying journal rankings, information about author charges and reviewers, flipped journals and journals/publishers with multiple exclusions.	April 2023
1.2	Additional copyright and licensing details were transferred to a separate page.	February 2022
1.1	A clarification to the endogeny criterion was added.	December 2021

The new DOAJ criteria, as presented in the application form, are divided into 6 sections: (1) open access compliance, (2) about (basic journal information), (3) copyright & licensing, (4) editorial, (5) business model, and (6) best practice. Each section is made up of several questions, in order to make sure provided information is accurate, some questions require applicants to offer a related journal webpage's link. Among all the questions required to be answered in the application form, they typically fall into three categories: general inquiries for data collection, minimal requirements for DOAJ inclusion, and recommendations of best practices.

Open Access Compliance
Only fully open access journals can be indexed by DOAJ. As we know, there are lots of definitions and several types of open access. "Open Access" is used to refer to both gratis and libre open access (DOAJ, 2023), however, DOAJ accepts a form of libre open access which requires not only that digital content is freely accessible online but also user rights and copyright ownership need to be clear. For applicants, the DOAJ definition of open access must be met, and an open access statement on the journal website is needed to confirm this.

About (Basic Journal Information)
The second section aims to collect general journal information, like title, website, publisher, ISSN, subject, sponsor, and publishing language. The journal's information is required to be consistent with registration information in the ISSN center; applicants can check its ISSN record by using the ISSN portal. For non-English journals, the translated titles can be added as an alternative title. The quality of a journal website is also important, applicants should pay attention to the accessibility of the journal website. For example, the following information must be easily accessible from the journal homepage: open access policy, aims and scope, editorial board, instructions for authors, editorial process, licensing and copyright terms, contact details and author charges. Furthermore, an own dedicated URL and a homepage for the journal are necessary, each full text article must have at least one distinct URL and be in

PDF or HTML format. Journals are permitted to show the Scopus metrics and the Clarivate-calculated Journal Impact Factor, although DOAJ does not endorse the use of Impact Factors or ranking metrics. It is not necessary for the website to be in English. If the website is available in different languages, the information must be consistent in all languages

Copyright & Licensing
Journals are required to utilize some type of licensing because it grants official authority to use the contents of articles. For authors to select the license that is most appropriate for their paper, journals must provide at least one type of license. The DOAJ advises using Creative Commons licenses to specify to applicants how published work may be used. Although six of the nine options on the application form for the question of license are Creative Commons licenses, DOAJ has no preference for which license should be applied. Since the Creative Commons license is one of multiple public copyright licenses, its conditions cannot be amended, hence it is prohibited from placing limitations on authors or users that conflict with the license's requirements. If the Creative Commons license cannot meet the needs of the journal, the journal can choose CC0, public domain, and publisher's own license.

Journal must state the ownership of journal and published contents. Generally, the original copyright of a paper is owned by the authors. Once the article is published, the copyright may be retained by the authors or passed to the publisher. DOAJ suggests that journals let authors retain full, unrestricted ownership of their publications' copyright, and authors provide the publisher other non-exclusive publishing rights as well as the first right of publication. However, it is acceptable for DOAJ inclusion if the journal requires authors to transfer the paper's copyright to the publisher. In some cases, restrictions may occasionally be imposed by the publisher even when the author retains copyright, for example, an exclusive license is required by the publisher, this indicates that the author no longer has unrestricted copyright. It should be noted that copyright terms cannot conflict with the licensing statements or the open access policy. In relation to open access content, the phrase "all rights reserved" is never suitable. In addition, since "fair use" does not equate to open access, DOAJ does not accept journals that include these limitations.

Editorial
For the journal's quality control process, editors and an editorial board are necessary. The names and affiliations of the editorial board members must be posted on the website. Editorial board members who all come from the same institutions are not recommended. Before being published, each article must go through a peer review process. The common types for peer review include editorial review, peer review, anonymous peer review, double anonymous peer review, post-publication peer review and open review. The journals without peer review would not be accepted by DOAJ and it is required that at least two independent reviewers should review each article. Editorial review is only accepted for arts and humanities journals and at least two editors must be involved in the editorial review process. The journal should clearly state its peer review type and process. The usage of a plagiarism checking service is not mandatory for DOAJ inclusion, even though the application form asks applicants whether they screen for plagiarism.

Business Model

The business model focuses on the costs that authors ought to pay when publishing their work, including article processing fees and any other costs to authors. There are some examples for additional expenses: editorial processing charges, language editing fees, color charges, submission fees, page charges, membership fees, and print subscription costs. A journal must make it clear if there are no fees or if there are applicable waiver policies, related statements should be easily found on the journal website.

Best Practice

The section of best practice includes archiving policy, repository policy, persistent article identifiers, ORCID iDs, and I4OC standards. For the archiving policy, long-term preservation services are mainly provided by CINES, CLOCKSS, LOCKSS, PKP PN Pubmed Central, Portico and national library. Repository policy must specify how the authors are allowed to deposit their papers in submitted, accepted, and published forms. For unique article identifiers, the article can be located anywhere by using a persistent article identifier (PID). The digital object identifier (DOI) is the most typical sort of PID. An alphanumeric code called an ORCID (Open Researcher and Contributor) iD is used to identify authors specifically. I4OC is a standard that requires citations to be organized, distinct, and open.

Some best practice questions are a part of DOAJ's seal criteria. Journals which exhibit best practices in open access publishing are awarded the DOAJ seal. The Seal has been given to about 10% of the DOAJ-indexed journals. It should be emphasized that journals can be included in the DOAJ without having to meet the Seal requirements, which means the journal can be accepted by DOAJ once it meets all the basic criteria.

FREQUENTLY OCCURRED ISSUES DURING THE APPLICATION PROCESS AMONG MALAYSIAN JOURNALS

Some high-frequency problems occurred during the application process among Malaysian journals, and these problems are significant to be good publishing practices as well as being beneficial to both journals and authors.

Most commonly, there are not very clear copyright policy and licensing policy found on journal websites. The related information is either missing or inconsistent on the website. Secondly, some conflicts between journals' copyright policy and open access policy have occurred. Journals state their open access policy on the website, but at the same time they state that "all rights reserved by the publisher" for their copyright policy, which is fundamentally incompatible with open access content. Furthermore, some contradictions exist between journals' copyright policy and licensing policy. For example, CC BY license has been adopted but authors have to transfer exclusive rights to the publisher once accepted for publishing; The publisher holds the copyright, and CC BY license has been stated, but the publisher does not allow the author to use it for commercial purpose. Similarly, The publisher holds the copyright, CC BY NC license has been stated, but the publisher does not allow the third party to use the adapted work. Obviously, for such a case, the license that journal adopted is not consistent with the statement of rights allowed for the users on the website;

The author retains the copyright under a CC-BY-NC license, but the publisher does not allow the author to use the work commercially. Under such context, the author, as the copyright owner, is not bound by the license; The license is intended to restrict publishers and other users from using the published content for commercial purposes; Besides, the author retains the copyright and the publisher holds the commercial rights, but there is no official statement on the website indicating that this right is transferred to the publisher. The rights granted by the author, the copyright owner, to the publisher should be specifically stated in the Copyright Transfer Agreement announced on the journal website.

It's also often seen that the ISSN provided by applicants cannot match up with the registration record from the ISSN center. Since a few years ago, DOAJ and the ISSN international center have had effective cooperation. Having a properly registered and validated ISSN is one of the first checks the editorial team makes when evaluating applications. For journals submitting to DOAJ, the ISSN is a starting point. The issue might be caused by the journal's failure to activate their ISSN numbers with the ISSN center. It's strongly suggested that the journal check the ISSN information through the ISSN portal before applying. Since 2021, journal landing pages in DOAJ include links to the entry for the journal in the ISSN Portal.

There are different models of open access publishing, for example, green open access, diamond open access, hybrid open access, and bronze open access. However, DOAJ does not accept all types of open access, only fully open access journals can be accepted by DOAJ. Lacking an open access policy should be avoided, and publishers should clearly state what they define as open access on the journal's website. Actually, the first question on the application form is to check whether the applicants comply with the DOAJ's open access definition.

Applicants are required to fill out website links for relevant information in some questions on the application form. Editors would check all the links to see if they were available and accurate. It was frequently observed that publishers didn't provide the correct links. This issue might be due to misunderstandings or a lack of knowledge about the application form's questions.

CONCLUSION

Open access publishing plays an active role in promoting academic exchange and knowledge dissemination. DOAJ is currently the most internationally recognized open access journal directory, and the journals included in DOAJ have undergone rigorous and prudent review. We can promote the rapid development of open access and information sharing by referring to DOAJ's selection criteria and inclusion rules, constantly improving the corresponding journal policies and services. Since DOAJ provides authoritative open access journals data and collection services of metadata, many libraries choose DOAJ as the primary data source of their literature service offered. Journals are included in DOAJ, which means that the quality and open access policies have reached international standards, and it is of great significance to enhance academic influence and increase the journal discoverability and visibility.

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