Vol 13, Issue: 01 (S), 2026

ABAAD Journal

ISSN: 2353 – 0030
EISSN: 2602-697X

The Open Access Strategy for Scientific Information and Its Role in Supporting and Promoting Scientific Research at the Algerian University: A Theoretical and Analytical Study of Reality and Prospects

استراتيجية الوصول الحر للمعلومات العلمية ودوره في دعم وترقية البحث العلمي بالجامعة الجزائرية: دراسة نظرية تحليلية للواقع والآفاق

Aicha AMAIRIA عائشة عمايرية*
aicha.amairia@univ-relizane.dz
Library and Information Sciences
University of Ahmed ZABANA Relizane, Algeria

Received: 30-01-2026 | Accepted: 20-05-2026 | Published: 10-06-2026

****

Abstract:

This study critically evaluates the role of Open Access (OA) policies in promoting scientific research within Algerian universities, necessitated by the global digital shift and the crises of traditional publishing. It analyzes OA concepts and channels (Gold, Green, Hybrid) through a descriptive-analytical method, reviewing field studies from multiple universities. Findings indicate institutional repositories enhance scientific heritage and research visibility, but barriers include information pollution and predatory journals. Ultimately, successful OA implementation in Algeria depends on robust technological infrastructure, qualified human resources, and legal frameworks that protect intellectual property while ensuring open knowledge access.

* Corresponding author: aicha.amairia@univ-relizane.dz

Keywords: Open Access to Information; Institutional Digital Repositories; University Scientific Research; Algerian University; Information Pollution.

ملخص:

تقييم الدراسة دور سياسة الوصول المفتوح للمعلومات العلمية والتقنية في دعم البحث العلمي بالجامعات الجزائرية، في ظل التحول الرقمي وأزمة النشر التقليدي. تهدف إلى تحليل مفهوم الوصول المفتوح وقنواته (الذهبية والخضراء والهجينة) وواقعه من خلال منهج وصفي تحليلي لدراسات ميدانية في عدة جامعات. تُظهر النتائج أن المستودعات الرقمية المؤسسية تعزز التراث العلمي والرؤية البحثية، لكن المعوقات تشمل تلوث المعلومات والمجلات الافتراسية. خلاصة النجاح تتوقف على تعزيز البنية التكنولوجية، تأهيل الموارد البشرية، وإقرار أطر قانونية تحمي الملكية الفكرية مع ضمان الانفتاح المعرفي.

الكلمات المفتاحية: الوصول الحر للمعلومات؛ المستودعات الرقمية المؤسساتية؛ البحث العلمي الجامعي؛ الجامعة الجزائرية؛ التلوث المعلوماتي.

1. Introduction:

The The global academic communication system is transitioning from closed publishing activity to open science. The Open Access (OA) movement, as defined by Budapest Open Access Initiative, means free, online access to peer-reviewed research papers, which is free of financial, technical, and legal barriers (Suber, 2012, p. 4). Thus, OA has perpetuated this "knowledge gap" between the Global North and South, with the former creating OA policies and business models with compliance mechanisms, and the latter facing a "Serials Crisis" of high subscription charges. In addition to these prohibitive costs, the Global South also faces structural and socio-economic barriers to participation in global open science (Chan et al., 2011).

Algeria is essentially dichotomous, supported by national infrastructures such as the Algerian Scientific Journals Platform (ASJP), the National Theses Portal (PNST), and institutional repositories. There are meaningful challenges to achieving a coherent OA policy, and existing local research is limited to isolated case studies, OA awareness surveys, or descriptive analyzes of institutional repositories, OA publishing initiatives and scientific collaboration platforms (see e.g. Srij & Wizram 2022; Qadari 2022), with limited exploration of links to policies, facilities and practices. As Aliwali et al. (2020, p. 48) note, more research is necessary to understand how to best disseminate information in these contexts.

Beyond the above, public actors, such as funders (Suber, 2012), and universities (Laakso et al., 2011), are investigated internationally. Challenges of limited digital literacy, underdeveloped digital infrastructure, predatory publishing and academic culture are discussed in Global South contexts.

This study aims at providing an evidence-based holistic investigation of the calculated implementation and structure of open access within the Algerian universities system. The central research question this study poses is: How is OA to scientific information implemented within the Algerian ecosystem of universities? What are the main drivers of its contribution to the advancement of research under structural, human, and ethical challenges?

We investigate this question by considering four approaches: (1) the digital infrastructure, including its maturity and interoperability, (2) attitudes and publishing practices in the academic community, (3) the role of information professionals as agents of change, and (4) ethics, including predatory publishing and intellectual property rights.

The contributions of this original research are twofold: the synthesis of the state of the art in OA in Algeria via a meta-analysis of studies applying global theory to the local context and the design of an OA planned model for developing countries, combining technology, human capital, institutional policy and academic culture. It provides evidence to support improved policymaking in Algeria and similar contexts, and makes a contribution to the global discourse on equitable and inclusive open science.

2. Review of Previous Literature:

The scholarly discourse on Open Access (OA) has been extensively explored in global and regional literature from historical, technical, economic, and social perspectives. This review synthesizes key contributions, moving from global principles to regional and local contexts.

2.1 Global Principles and Development

The foundational Budapest Open Access Initiative (BOAI) defines OA as the free online availability of peer-reviewed literature, permitting users to read, download, and distribute it (Suber, 2012). Scholars widely frame the OA movement as a direct response to the "serials crisis"—the unsustainable rise in journal subscription costs that restricted institutional access, particularly in the Global South (Laakso et al., 2011). This rationale was solidified by

subsequent declarations like Bethesda and Berlin, reinforcing the imperative for unrestricted access (Aliouali et al., 2020, p. 49).

Economically, two primary models have emerged: the Gold route (publishing in OA journals, often involving Article Processing Charges [APCs]) and the Green route (self-archiving in institutional or subject repositories) (Piwowar et al., 2018). Bibliometric evidence confirms an "OA citation advantage," enhancing research visibility and impact (Piwowar et al., 2018). However, critiques highlight risks in the Gold model, as APCs can create new financial barriers for researchers in underfunded institutions (Chan et al., 2011).

2.2 Contexts of Developing Countries and the Arab World:

For developing nations, OA presents both transformative potential and systemic challenges. International programs like Research4Life are vital for providing content access (Chan et al., 2011). Yet, structural obstacles—including weak digital infrastructure, low awareness of OA mechanisms, and promotion systems favoring traditional journals—hinder full engagement (UNESCO, 2021).

In the Arab region, research interest is growing. Studies have examined the development of institutional repositories (e.g., Al-Hammadi, 2019), analyzed researchers' awareness and usage of OA sources—noting disciplinary disparities (e.g., Al-Otaibi, 2020)—and emphasized the evolving role of university libraries in supporting this transition (e.g., Abu Zaid, 2021).

2.3 The Algerian Reality: Achievements and Challenges:

Algerian literature reveals a multifaceted landscape:

- Policies and Infrastructure: Studies highlight a supportive national framework, notably the Algerian Scientific Journals Platform (ASJP) and National Theses Portal (PNST). Case studies of institutional repositories, such as that of Boumerdes University, document their role in cataloguing intellectual output and preserving digital memory (Srij & Wizaram, 2022; Laabesh & Aknoush, 2025).
- Academic Community Behavior and Awareness: Field research indicates high reliance on OA sources among academics. Studies show a majority of professors use OA journals (Qadari, 2022), and doctoral students are extensive users, with variations across disciplines (Ezzeddine & Jazairi, 2021).

- Role of Information Specialists: The evolving role of librarians towards managing digital repositories and advocating for OA is recognized, underscoring a pressing need for continuous professional training (Boulshaour & Hadef, 2022).
- Challenges and Risks: Scholars warn of significant threats, including information pollution and the proliferation of predatory/hijacked journals that exploit the OA model (Ajjal & Al-Hamza, 2021). Others stress the necessity of adopting emerging technologies like AI to meet digital transformation demands (Ghalem & Ghanem, 2024).

2.4 Identified Research Gap:

Despite valuable contributions, a significant gap persists. Existing Algerian and Arab research predominantly employs descriptive or single-case-study methodologies. There is a lack of comprehensive, empirical studies that integrate policy analysis, infrastructure assessment, broad behavioral measurement, and human resource strategy within a unified theoretical framework. Furthermore, connections between local challenges and the global theoretical discourse on equitable open science remain underexplored (UNESCO, 2021; Chan et al., 2011). Consequently, this study aims to bridge this gap by conducting a critical meta-analysis that synthesizes evidence from diverse sources, evaluates Algeria's OA strategy as an integrated system, and situates local findings within global frameworks for sustainable and equitable knowledge access.

3. Theoretical and Conceptual Framework:

This analysis of Algeria's open access (OA) strategy employs an interconnected theoretical framework to examine the interplay between policy, technology, practice, and scientific output, linking global OA philosophy to local application.

3.1 Open Access: Core Definition and Pathways:

The foundational definition comes from the Budapest Open Access Initiative (BOAI), describing OA as the free online availability of peer-reviewed literature, removable from financial, legal, and technical barriers (Suber, 2012, p. 4). This philosophy is operationalized through two primary, complementary pathways:

- Green OA: Self-archiving in institutional or subject-based repositories.
- Gold OA: Publishing in OA journals where content is immediately free to read (Aliouali et al., 2020, p. 49).

3.2 Digital Repositories: The Infrastructure:

Institutional digital repositories form the technical backbone of the Green route. They are systems for collecting, preserving, and providing access to an institution's intellectual output (Sarij & Ziram, 2022, p. 377). Their role extends beyond storage to actively curating institutional memory, preserving heritage, and providing access to valuable "grey literature" like theses and reports (Labas & Aknouche, 2025, p. 214; Benherira & Shasha, 2022, p. 72).

3.3 Evolution to Open Science:

OA is a pillar of the broader "Open Science" paradigm, which aims to make scientific knowledge openly available, accessible, and reusable (UNESCO, 2021, p. 8). This evolution encompasses open data and methodologies, guided by the FAIR principles (Findable, Accessible, Interoperable, Reusable), representing a strategic direction for modern research infrastructure.

3.4 The Human Element and Digital Transformation:

Effective OA implementation relies on skilled human capital. Librarians and information professionals are crucial as curators and advisors, facilitating OA adoption (Boualshaour & Haddaf, 2022, p. 511). Digital transformation, leveraging AI and data analytics, is key to advancing these services and supporting the open science agenda (Ghallam & Ghanem, 2024, p. 82).

3.5 Ethical Challenges: Integrity Threats:

The open environment introduces ethical risks, primarily information pollution from predatory and hijacked journals. These entities exploit the OA model, bypassing peer review to charge fees, thereby threatening scientific credibility and requiring heightened academic discernment (Laggal & Hamza, 2021, p. 519).

3.6 Analytical Framework for the Algerian Context:

This multi-layered framework provides tools to analyze Algeria's reality through critical questions: the alignment of national policies with Green/Gold pathways; the transformation of repositories into active research platforms; the readiness for Open Science and FAIR principles; and how ethical threats and the digital divide impede theoretical implementation. It thus combines global theory with practical tools for strategic local evaluation.

4. Methodology:

This study relied on a descriptive-analytical approach aimed at describing the phenomenon under investigation (the open access strategy in Algerian universities) and systematically

analyzing its components and various relationships to reach a deep understanding and draw evidence-based conclusions. This approach was implemented through meta-analysis of a homogeneous set of previous studies and field research conducted in the Algerian university context. This synthetic approach allows transcending the limits of individual studies, synthesizing their results, and providing a comprehensive and quasi-quantitative assessment of the current reality.

4.1 Data Sources and Collection :

Secondary data were collected from a focused set of peer-reviewed academic sources that addressed the topic of open access and its manifestations in the Algerian university environment. The data collection plan included the following sources:

- Case studies of university libraries and digital repositories: such as the study of the Central Library of the University of Algiers -1-, which focused on the role of the library and the professional awareness of its staff, and the study of the digital repository of the University of Biskra, whose content was analyzed to measure its contribution to the dissemination of gray literature. Other case studies covering university repositories such as the University of Boumerdes and the University of Constantine 2 were also included.
- Survey and investigative studies: included studies that used questionnaires and interviews to measure the awareness and use of open access sources by the academic community (professors, researchers, students), such as those conducted at the University Center of Birka and the University of Algiers 2.
- Analytical and bibliometric studies: studies that examined content or measured performance were analyzed, such as bibliometric analysis of scientific output or analysis of publishing policies.
- Theoretical and conceptual literature: included references that grounded the concepts of open access, digital repositories, and gray literature in both global and local contexts.

4.2 Tools and Methods of Analysis:

The qualitative and quantitative content of the selected studies was analyzed using a systematic Content Analysis approach. A data extraction form was designed to collect structured data from each study, focusing on the following aspects:

- Descriptive data of the study: authors, year, institution under study, methodology used.

- Main variables: study objectives, nature of the research sample (if any), data collection tools used (questionnaire, interview, observation, document analysis).
- Results and Conclusions: Quantitative results (such as usage rates, awareness levels, digital content distribution) and qualitative results (such as reported challenges, proposed recommendations, opinion trends) related to each dimension of the research problem were extracted.
- Theoretical and Conceptual Framework: The basic concepts on which the study was based.

After data extraction, the data were organized and categorized according to the main research themes (infrastructure, user behavior, role of libraries, challenges). They then underwent the following analyses:

— Quantitative Meta-Synthesis: Similar numerical results from different studies (such as rates of open access usage by researchers) were aggregated to provide an estimated range or average describing the broader reality.

— Qualitative Meta-Synthesis: Qualitative conclusions, recommendations, and recurring challenges across various studies were analyzed and summarized to identify common patterns, themes, and core issues.

— Comparative Analysis: Results were compared across different universities and scientific disciplines (humanities versus exact and technical sciences) to highlight similarities and differences.

4.3 Methodological Limitations:

Although the dimensional analysis approach provides a comprehensive perspective, this study faces some limitations:

- Dependence on the quality of primary studies: The accuracy and reliability of the synthesized results largely depend on the methodologies used in the original included studies.
- Generalization: While the results offer a representative picture of general trends, they may not necessarily reflect the precise situation in each individual Algerian university.
- Lack of new primary data: The study relies exclusively on previously published data, meaning it does not capture very recent developments that may have occurred after the publication of those studies.

Through this combination of quantitative and qualitative retrospective analysis, this study aims to consolidate the existing fragmented knowledge and provide a comprehensive and reliable assessment of the open access strategy in Algerian universities, paving the way for analysis and discussion.

5. Analysis of Results:

This section relies on a meta-analysis of previous field and analytical studies conducted in the context of Algerian universities, to present an integrated and semi-quantitative picture of the reality of the open access strategy. The results are organized according to the main axes that determine the effectiveness of this strategy.

5.1 Reality of Digital and Legislative Infrastructure:

The findings suggest that limited but meaningful progress has been made in OA digital infrastructure at Algerian universities. Institutional repositories such as the DSpace-based system at the University of Boumerdes show technical capacity to preserve research outputs (Srij Wziram, 2022). Though repositories like Biskra show that national policy is having some success in shifting the needle on the deposit rates of theses (Ibn Harira and Chacha, 2022), a key obstacle remains after this promising picture: OA deposit policies at the institutional level are severely lacking. This was reported as one of the biggest barriers towards reaching the goals of national OA policy at the University of Algiers (Dui and Berkan, 2021).

5.2 Awareness and Use of Open Access Resources by the Academic Community:

Meta-analyzes have suggested increasing OA awareness and adoption among scholars, highly variable by rank and discipline. At Berriane University Center, 84.61% of research professors use OA journals (Qadari, 2022, p. 425). Algiers 2 had similar results, with 70.83% of doctoral students using OA. STEM disciplines are more likely to favor English-language international Gold OA journals (Ezzeddine and Jazairi, 2021, p. 131). Humanities researchers prefer Arabic-language literature (Ezzeddine and Jazairi, 2021, p. 132). While reasons for adopting Gold OA publishing often include free access and availability, reasons for the reported hesitance of Arabic researchers to publish in Gold OA journals include their reliability (Qadari, 2022, p. 428).

5.3 The Evolving Role of Information and Library Specialists:

As such, academic libraries and information specialists form a critical but limited element within the digital support functions. There is a major skills gap relating to repository management. Over half of specialists at Badji Mokhtar-Annaba University claim they have self-trained in these skills, due to a lack of formal training opportunities (Boualcher & Hadef, 2022, p. 519). This has implications for librarians' roles in efforts to encourage responsible open access, combat predatory journals, and offer digital scholarly identity services. New technical expertise and training models are needed that expand technical continuing education beyond customary library skills and competencies.

5.4 Key Challenges and Risks:

Alongside achievements, the analysis highlights a set of deep challenges:

- Ethical and credibility challenge: The phenomenon of predatory and hijacked journals poses a significant threat to the integrity of scientific research. Predatory publishers exploit researchers' desire for rapid publication, leading to the spread of unreviewed work and erosion of trust in the open access model (Lajjal & Hamza, 2021, p. 524).
- Digital and skills gap: There is a significant disparity in the quality of technical infrastructure between major universities and emerging ones. Additionally, weak digital skills among some researchers and senior professors limit the activation of electronic services and repositories (Daï & Berkan, 2021, p. 16).
- The ambiguous legal framework: The absence of clear policies on copyright and archiving in the digital environment constitutes an obstacle to the full deposit of complete article texts (final peer-reviewed versions), which limits the effectiveness of repositories (Ramadan, 2018, p. 45).

5.5 Indicators of Open Access Impact:

Despite the challenges, there are positive indicators of the beginning of open access impact. Digital repositories appear as an effective tool to increase the visibility and citation of local scientific output, especially gray literature that was previously confined to shelves. Additionally, easy access to international sources supports researchers' productivity and reduces scientific isolation (Qadari, 2022, p. 429). These combined results form a basis for in-depth discussion in the next section, where they will be interpreted and linked to the theoretical framework and global literature.

6. Discussion:

The current study provides a comprehensive analysis of the multidimensional reality of the open access strategy in Algerian universities. The aggregated results allow for deeper interpretations that go beyond description, linking the local scene to the international theoretical framework and the broader academic debate on open science and the obstacles it faces in developing country environments.

6.1 Interpreting Technological Progress in Light of Institutional Challenges

Despite developing the technical capacity to build digital repositories (Srij Waziram, 2022), a planned misalignment occurs when repositories mainly host grey literature such as theses (Ibn Harira & Shasha, 2022), highlighting a divergence from global best practices for building sustainable open infrastructure (Ghallam & Ghanem, 2024). The problem is that there are no mandates for deposit (Dai & Barqan, 2021), so green open access cannot fully institutionalize itself as a way to share current research literature.

6.2 Duality of Academic Awareness: Consumption versus Production:

The study found that, despite a high consumption of OA information resources by professors (84.61%) and students (70.83%) (Qadari, 2022, p. 425; Ezzeddine & Jazairy, 2021, p. 131), in line with the free access and easy usage principles of OA (Laakso et al., 2011), researchers were reluctant to publish their research findings in OA journals. Concerns about credibility and quality (Qadari, 2022, p. 428) suggest that the local OA publishing market is still in its infancy, and researchers see themselves as 'consumers' rather than 'producers' of OA. Furthermore, linguistic and disciplinary differences (Ezzeddine & Jazairy, 2021, p. 132) highlight the need for more high-quality Arabic journals in diverse fields such as humanities and social sciences.

6.3 Libraries and Digital Skills: An Evolving Role in Addressing a Training Gap:

Though the findings suggest that the role of the information specialist has shifted from customary duties to digital mediation and knowledge management (Boulshaour and Hadaf, 2022), the fact that digital skills are largely taught through self-learning indicates institutional efforts are lacking. This gap may also be preventing libraries from leading the shift toward open access and combating the problem of predatory journals. Investments in the continuous development of human capital are equally important to the building of technology infrastructure in the open science ecosystem.

6.4 Ethical Challenges:

While predatory and hijacked journals are a global phenomenon (Laajjal & Al-Hamza, 2021), they are particularly present in Algeria, due to vulnerabilities within the country, such as a lack of understanding of predatory journals, the absence of institutional publishing policies, and academic metrics that incentivize publishing speed. This is therefore not an external threat. It is an expression of internal systemic flaws which can only be resolved with institutional reform. It also includes developing evaluation and recognition policies that reward publishing in highly-regarded venues - open access or otherwise - to tackle the root causes of the problem in academia.

6.5 Towards an Integrative Model: Linking Dimensions to Create Real Impact:

Conclusions: The challenges of Open Access in Algerian universities should be understood as systemic issues linked to the fragmentation of technical infrastructure, a lack of researcher skills and engagement, and underdeveloped support roles. In short, the open science framework developed by UNESCO (2021) shows that individual elements are not sufficient. What is needed is a more holistic approach combining infrastructure, policies, researcher incentives and capacity building so that Open Access can transform from an access channel into an enabler to improve the quality, visibility and impact of Algerian scientific research.

7. Conclusion:

The study confirmed that OA among Algerian universities has shifted from theory to practice, with the establishment of frameworks such as institutional repositories, and that researchers have a good understanding of it and use its resources to fill the gap of limited commercial subscriptions (Kaddari, 2022; Srij & Waziram, 2022). While librarians have evolved into digital content managers (Boulshaour & Hadef, 2022), implementations remain structurally misaligned between technology and policy, consumption and production of knowledge, and new professional roles and formal qualifications. While there is a lack of calculated repository content and ethical challenges posed by predatory journals, Algeria is laying the groundwork for a national OA ecosystem, but there is uncertainty as to whether these components can be assembled into an effective system (Lajal & Hamza, 2021).

- **Recommendations:**

Based on the previous conclusions, this study presents a set of recommendations aimed at achieving integration and sustainability of the open access strategy:

- Establish and Enforce a Thorough Open Access Policy: Adopt binding national and institutional policies that require all publicly funded research to be deposited in interoperable digital repositories in compliance with the FAIR principles and linked to researcher identifiers (e.g., ORCID).
- Integrate Open Access into Academic Incentives and Support Systems: Integrate quality open access publishing into research funding, tenure, university policies, and academic promotion systems, and create library support units that help researchers with ethical publishing and data curation workflows.
- Develop a National Capacity-Building and Quality Assurance Program: Train researchers, students and information specialists in open science and research ethics, and develop a national system to evaluate journals and combat predatory publishing practices.
- Strengthen the National Open Science Infrastructure: provide technical and financial support to upgrade Algerian journals and web platforms for open access to reach international level of quality.

- **References:**

-Articles:

1. Aliwali, H., Ben Yahia, A., & Qureshi, B. (2020). Open access to scientific information: Concepts and applications. Journal of Libraries and Information, 15, 45–65.
2. Ben Harira, M., & Shasha, B. (2022). Utilizing the university digital repository to publish grey literature: A case study of the Mohamed Khider University of Biskra repository. Al-Baheth Journal, 20(3), 71–92.
3. Boulshaour, R., & Hadef, S. (2022). The role of the information specialist in activating open access to scientific information in university libraries: A case study of the central library of Badji Mokhtar University of Annaba. Journal of Libraries and Information, 17, 509–526.
4. Chan, L., Kirsop, B., & Arunachalam, S. (2011). Towards open and equitable access to research and knowledge for development. PLoS Medicine, 8(3), e1001016.
5. Ezzeddine, N., & Jazairi, M. (2021). Use of open information sources among doctoral students: A field study at University of Algiers 2. Journal of Humanities and Social Sciences, 13(4), 125–138.

6. Ghalem, Mohamed Reda, & Ghanem Nadhir. (2024). Digital Transformation of University Libraries in Light of Emerging Technologies: Between Reality and Expectations. Journal of Human and Social Sciences, 13(04), pp. 80-106.

7. Ibn Harira, N., & Shasha, F. (2022). Open access to grey literature in Algerian academic digital repositories: The University of Biskra repository as a model. Al-Muqaddima Journal for Humanities and Social Studies, 7(2), 71–96.

8. Laabesh, A., & Aknoush, F. (2025). Utilizing Digital Platforms to Enhance Institutional Memory in Algerian Universities: A Proposed Model for Constantine 2 University. Journal of Information Studies, 5(1), 213–235.

9. Lajal, Z., & Al-Hamza, H. (2021). Predatory and Hijacked Journals as Forms of Information Pollution and Threats to Scientific Integrity. Al-Farahidi Literary Journal, 13(45), 517–532.

10. Piwowar, H., Priem, J., Larivière, V., Alperin, J. P., Matthias, L., Norlander, B., ... & Haustein, S. (2018). The state of OA: A large-scale analysis of the prevalence and impact of Open Access articles. PeerJ, 6, e4375.

11. Qadari, M. (2022). Use of Open Access Information Sources by Faculty Members: A Field Study at the Brika University Center. Journal of Libraries and Information, 17, 417–434.

12. Ramadan, I. (2018). A proposed strategy for providing open access services in Egyptian and Arab university libraries. In the Guide to Open Access in Egyptian and Arab Libraries (pp. 35–62). Egyptian Association for Libraries, Information and Archives.

13. Research Team. (2023). University libraries and the open access movement: Between idealism and necessity. International Journal of Information and Archives, 15(1), 361–388.

14. Srej, F., & Zirram, W. (2022). The digital repository as a mechanism for preserving intellectual production: A case study of the repository of Mohamed Bouguara University of Boumerdes. Journal of the Researcher, 20(2), 375–392.

15. Suber, P. (2012). Open Access. MIT Press.

-Internet:

16. Daï, A., & Berkan, M. (2021). The role of Algerian university libraries in open access to scientific and technical information: A field study at the central library of University of Algiers 1, 8(3). Retrieved from https://aleph.edinum.org/4789?lang=ar (2025, December 14/H: 17:16).

17. UNESCO. (2021). UNESCO Recommendation on Open Science. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000379949 (2025, November 20 /H: 23:20).

18. Research Team. (n.d.). Open access to information in university libraries. Retrieved from https://www.scribd.com/document/469057299/ (2026, January 01/H: 15:10).

19. Laakso, M., Welling, P., Bukvova, H., Nyman, L., Björk, B.-C., & Hedlund, T. (2011). The development of open access journal publishing from 1993 to 2009. PLoS ONE, 6(6), e20961. https://doi.org/10.1371/journal.pone.0020961 (2025, December 04/ H: 07:33).

20. Laakso, M., Welling, P., Bukvova, H., Nyman, L., Björk, B.-C., & Hedlund, T. (2011). The development of open access journal publishing from 1993 to 2009. PLOS ONE, 6(6), e20961. https://doi.org/10.1371/journal.pone.0020961 (2025, November 05/ H: 06:30).