

## Towards Effective Research Publication: A Comprehensive Review of Scientific Journal Platforms in Algeria

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Date of submission: 01/03/2023

Date of acceptance 16/06/2023

Date of publication: 30/06/2023

### Abstract:

Currently, many researchers across all fields are exploring new technologies to create new research. The rise of social media platforms has significantly changed how people communicate and interact, and researchers are interested in understanding how these platforms can be used alongside computational resources to facilitate digital research. A platform is a web application that allows users to manage website content without requiring technical knowledge. Journal platforms facilitate the exchange, reading, and creation of academic research, and researchers can access papers, data sets, and other research artifacts with open free access. However, many novice Algerian researchers and PhD students are not yet familiar with these platforms, and some struggle to use digital platforms like ASJP. This paper aims to examine the most prominent journal platforms, including ASJP, ResearchGate, Mendeley, Google Scholar, and Moodle, and to evaluate their advantages through descriptive analysis. Additionally, the paper will highlight the components and services of these platforms which every researcher needs to know before publishing academic research in Algeria, as mastering digital platforms has been a subject of continuing study.

**Keywords:** Academic research; digital platforms; novice researchers; Publishing; journal platforms

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## **1. Introduction**

Digital platforms have promoted interest in all disciplines for its benefit of creating new technology, educational models and scientific research. More and more universities, companies and centers are either well into their digitalization process or in their beginning pits of it. Yet, as the development of technology continues and new needs from users arise, the more traditional universities and companies are investing in information technology (Katz, 2020)

Nowadays, an increasingly many researchers and practitioners have started paying attention to the digital platform area, where they can find new opportunities, practices and new teaching models have particularly been very interesting. Social media platforms such as Facebook have changed how people communicate with each other. Operating system platforms such as Android have become the omnipresent center of the telecommunications system. Also, Payment platforms such as PayPal are revolutionized the financial system.

## **2. Learning Management Systems or Platforms**

Internet is a wonderful tool for use in the teaching process as it permits extension of areas, so that students learn to communicate and share, encouraging them to enjoy learning. More specifically, they will learn in those environments or contexts that assure a set of characteristics for creating and designing courses in the distance. These environments are also known as LMS Learning Management System. Some common LMss are Moodle, Edmodo, Mahara and others. These systems greatly differ from each other, in the programming language they were developed, and in features and services they offer.

In many other concepts the E-Learning concept is presented through different terms depending on the context such as learning management system (LMS); Course Management System (CMS), Learning Content Management System (LCMS); Managed Learning Environment (MLE); Learning Support System (LSS) or Learning Platform (LP). In other context is known as education via \_computer mediated communication or online education (Kateeva et al., 2010). LMS has the crucial objective to centralize and clarify administration and management of teaching and learning through e-learning or what is called remote teaching. It refers to a system that covers the whole process of online teaching/ learning, possessing an interface that helps all employees: teachers, students, administrators and visitors to communicate about their learning process, and urges

them, at the same time, to work together, through the exchange of courses, research and knowledge.

LMS or platform provides a context or a space for learning and exchange. It often refers to an individual or individuals who represent organizations, institutions, companies... with several backgrounds and objectives. These individuals come together to find out problems, identify opportunities and discover suitable ways to improve and achieve their aims. They may design implement activities, use particular programs, implement research....

Among the key benefits of e-learning platforms we can find the accessibility and flexibility, from the students' perspective, the rationalization of different data resources, interactivity and enhancement of communicative learning. Online courses have the advantage of providing different content for students anywhere all over the world, faster and more attractive than the conventional face to face courses (Lopes, 2018). In addition, E- learning Platform provides easy access to a wanted material or course at any wanted time besides in case of any chronological or geographical restrictions the learner is not obliged to attend and he may feel that he is acting completely alone isolated from the real world. The platform offers many new ways of learning via distance, for instance using chats, forums, messages...

## **2.1. ResearchGate**

ResearchGate Platform is the famous social networking service for researchers and scholars in the world though there are other websites, such as Researcher ID, Academia and Linked. Researchers prefer ResearchGate, except in China, they use Research Mate.

ResearchGate also updates research publication list and makes it easy to share by posting or by privately sharing with specific individual researchers. It is a good site for free resources, a free platform for documentation of research activities, sharing knowledge and experiences (Research-Gate, 2019)

Due to the fact that many researchers in Algeria use a lot Research Gate to correspond and collaborate with each another, the Algerian Higher Education Ministry is lately thinking of creating an Algerian ResearchGate for Algerian Scholars only; the project is going to be realized soon by November 2020 and the Algerian Scholars will have the Algerian Research-Gate.

## **2.2. Mendelay**

Mendeley Platform is a research management tool used to organize research works. It is an academic software that indexes and organizes all of PDF docs and research papers into a digital bibliography and cites them as well. It also looks up PubMed, Cross Ref, DOIs, and other related document details automatically. Such platform permits researchers to collaborate share information, resources and experiences with their fellow researchers (Mendelay,2019)

## **2.3. Google Scholar**

Google Scholar is an internet-based search engine or a network designed to discover scholarly research data, books, theses, articles, preprints, theses, abstracts, and court claims from academic publishers, societies, online repositories, and universities. This platform serves to assist researchers to solve the problem of a better tool for finding a full-text docs published at any era rather than link resolver software or journal portals. Also, such platform proved to be more effective user performance and user satisfaction. (Dixon,2010)

## **3. Why Moodle in Algeria?**

Moodle stands for Modular Object Oriented Term Developmental Learning Environment. As a concept represents one of the most widely used open source e learning platform. It was originally created by Martin Dougiam, as he is computer science engineer and educator the first version of Moodle released on August, 2002 (Chun,2011). Within such a system; students or learners and even educators can be given a single robust. Students can access course contents in different formats (image; sound, text) and to interact with teachers or colleagues also it can be described as a tool by teachers to help foster autonomy by organizing learning to help foster autonomy by organizing learning recourses and facilitating an environment for autonomous learning.

Moodle mainly is used to make courses online in order to have an effective class it doesn't matter which level you are teaching or which level is concerned. This course management system Moodle is a web application that can be located anywhere in the world and the person who used Moodle is Moodler. This platform provides a set of web-based tools in order to allow the creation of online courses such as forums, messaging, quizzes, blogs, assignment and databases. Moodle platform has 3 levels of use with features of differential use and access. those three users are: the administrator who is the one in charge of the management of

the platform, the teacher who has many roles to play depending on the course nature for example he can be a trainer, facilitator, promoter and the third user is the student who has also different roles to play he can be a learner participant (DOUGIAMAS & TAYLOR, 2002)

Moodle has been adopted by Algerian Universities since 2008 as the first tentative of e-learning growth. Moodle was an open source LMS, besides being a stable centralized platform, it is highly secure. Many programs as well as plugins are available to protect it from malware and virus. It is therefore trusted by organizations and institutions all over the world. Moreover, it is available in more than 100 languages. It has also more than 100 million registered users around the world, and hence the best choice for Higher Education Institutions in Algeria. Moodle proved to be effective to facilitate instruction for educators and even teachers and provide them with useful activities to enhance online learning in personalized environment, that foster learner's autonomy, so that they become more independent. In addition, Moodle provides all the pedagogical activities, workshops, glossaries, wikis, lessons.... Thus, it is used for training, online course development, administration services, teachers' collaboration online and remote education opportunities. It has been recognized as a Top 100 Learning Tool by the Centre for Learning and Performance Technologies (Lone et. al., 2018)

#### **4. Scientific Research Publication in Algeria**

Publishing Scientific Research is one of the most important tasks of higher education institutions whose primary objective is production of knowledge and its dissemination. Scientific publication in the last decade has become rapidly increasing due to the availability of modern technologies. Also, thanks to many applications which have a great impact in facilitating publication's procedures and operations. These applications came to solve problems of scientific publication in the conventional environment, and bring alternatives that serve the author, publisher, and researcher and reader.

The idea of having a scientific research journal to be a container for availability of different research issues, volumes, topics ..... in itself represents a great challenge for many scholars. The costs involved in the deployment process under the conventional system and the accompanying obstacles and difficulties (complicate process, lack of respect for publication deadlines, difficulty in obtaining numbers....). Due to all these challenges, an urgent need to shift towards electronic publication has emerged, either by digitizing the paper versions

of previous issues or through pure electronic versions. Therefore, the good exploitation of the new technological means was necessary to overcome the previous problems and contribute to scientific publication development in Algeria.

The Algerian Ministry of Higher Education and Scientific Research has made many attempts to improve the reality of scientific research and overcome the problems of the conventional publishing system, through the creation of an electronic platform to manage and facilitate scientific communication between researchers from different areas of the country, and gathering all the paper published articles of various laboratories and research centers of Algerian universities and making them available on the platform with an open access for everyone.

Publishing platforms have a great role in introducing journals, especially those that they do not possess websites, and therefore, enable or facilitate the access to them and their valuable contents. According to Fox et al., (2015), there are two types of platforms:

- Platforms which seek to broadcast journals and introduce them only
- Platforms which create and broadcast journals as well; in this case the role of these platforms is rather providing services such as a space to receive authors' articles, evaluate them by experts, and prepare both copies hard and electronic.... all these operations are carried out on one platform.

## **5. Algerian Scientific Journals Platform «ASJP»**

The Algerian Scientific Journals Platform (ASJP) is an effective electronic system came to bypass problems in conventional publishing and contributes to the dissemination and availability of knowledge production on a large scale among the Algerian academic community (Soudous et. al, 2020). It is an automated system for managing electronic publication of scientific journals that enables a continuous control over all steps the scientific publication process, starting from the authors registration, transmission, attribution, auditing, template, reviewing till publishing online.

To achieve the main target of the Algerian Ministry of Higher Education and Scientific Research to develop and improve the of scientific and technical information communication process, a national system in a form of a platform was created to facilitate and manage university scientific publication process and ensuring an electronic access to published articles, works and research. Also, in

order to make them available to all without any hindrance.

ASJP is an electronic platform for national scientific journals supervised by the Center for Research in Scientific and Technical Media (CERIST) and seeks to assist researchers wishing to publish their researches or articles to choose the appropriate scientific journals that correspond to their research themes (GHAZAL & BOURAHLI, 2019) It was officially launched in 2016 to protect researchers from falling into traps of fake publishers and non-reliable journals and guarantee the article to be published. The platform is available at the following website: <https://www.asjp.cerist.dz/>

### **5.1. How does the ASJP Work?**

KOOHANG and HERMAN (2006) presented a detailed description of the essential components that should be available in the ideal form of electronic publishing platforms claiming that a model platform consists of three basic elements:

- The Communication System: It connects the author with the editorial board
- Content Management System: It is the system responsible for coordinating and disseminating content.
- The Portal: The most important part because it ensures the accessibility and download ability of scientific information. The platform portal represents the interface through which researchers can access the platform. It also provides search services, whether simple or advanced, and displaying results with ease, flexibility and effectiveness. The three core components are demonstrated in figure 1:

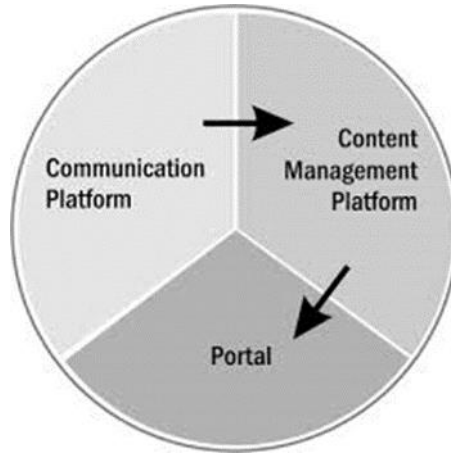


Figure1: The Components of a Modal Platform

## **5.2. The Core components of Scholarly Publishing Platforms (KOOHANG &HERMAN,2006)**

The ASJP is based on an electronic system that can organize and classify journals according to certain criteria, due to the fact that every journal has its own metadata: the structure and organization of its issue, periods of issuance, year of its establishment, ISSN issuing authority, scientific specialty, editorial team, international standard number, data on their numbers, full texts of research and scientific articles .... Moreover, it can ensure the ability to contact the members of the editorial board and reviewers and follow the articles sent through the "Indicators Board" or "The control panels" which are also divided into other units: The Unit of Selecting a Journal, The Unit for Submitted Articles, The Unit for Articles under Review, The Unit for Rejected Articles, The Unit for Accepted Articles, Messages and Notifications Unit.....

## **5.3. ASJP Services**

According to ELHAMZA (2018), the most prominent services provided by the platform are as follows:

- It provides the ability to have an account on the platform and have multiple options as an author, as a reviewer or as a manager
- It provides the last ten articles published for a journal on the platform.
- The new Journals are included in the platform.
- It provides new, updated statistics on the number of recently published



articles.

- It provides the ten most downloaded articles on the platform.
- Simple search and advanced search service.

#### **5.4. The Role of ASJP in Supporting Scientific Research and Publication**

SOUDOUS and BENSEBTI (2018) presented a set of roles which ASJP has played in developing scientific research publication in Algeria and they are as follow:

- It plays a great role in introducing the scientific productions published in hard copies and being neglected and forgotten by scholars.
- It has an important role in informing researchers and teachers about the indexed journals which they should publish in, to enhance and disseminate the Algerian Scientific Research.
- It has a big role in contributing to the development and collaboration in research of many researchers in different cities to enhance university academic publishing.
- It is a means of overcoming publishing problems in Algerian universities by providing the possibility of sending works and research directly to the editorial board of the selected journal.
- It is essential as it represents a national project that greatly contributes to supporting and enriching the Algerian Digital Content on the Web.
- It is successful in shortening the length of reviewing process, which is a big challenge the researchers usually suffer from. Yet, the speed of publication is among the most important advantages of the ASJP
- ASJP has a big role in eliminating bureaucracy, and subjectivity in reviewing articles.
- It represents an initiative in the field of scientific publishing and an effective means of controlling journals in Algeria. (Soudous, 2020)

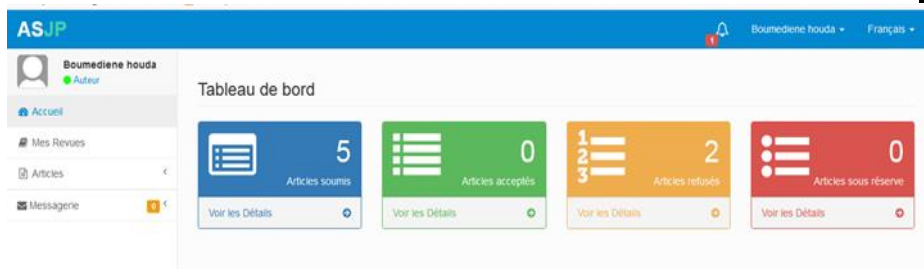


Figure2: ASJP Interface of a Researcher's Account "Indicators Panel"

Most importantly, ASJP has a crucial role facilitating scientific publication in Algeria due to the high-end services it provides in the publishing process. Relying on advanced technologies, the researcher (the author) can publish his articles through his own "Indicators Panel" (Figure 2) which represents the interface of ASJP. The panel provides the researcher with all the details regarding his article, from the deposit to its publication, which gives the author the ability to follow all steps of his article publication process.

It is also worthy to mention that despite the newness of the platform, it has succeeded to attract a great number of journals (laboratories journals, indexed journals and even non-indexed journals). Currently, 510 scientific journals (according to the statistics of July 2021) from various scientific disciplines are granted to the researcher in the platform, the fact that provides researchers with much freedom and alternatives to choose from; and enhances the visibility of their works throughout the world, which strengthens the scientific contact between the Algerian researcher and researchers in other Arab countries. Today, ASJP has reached more than 7,800 authors of diverse disciplines who published their research in. (ASJP, 2021)

Despite the fact that the ASJP is a recent experience as one of SRJM Platforms in Technology based research field, it has succeeded in promoting scientific research dissemination and publication in Algeria, as it publishes papers in 7 languages. It also covers 30 domains (figure, 3) ordered alphabetically, with more than 55608 articles available in full texts. (ELHAMZA, 2018)

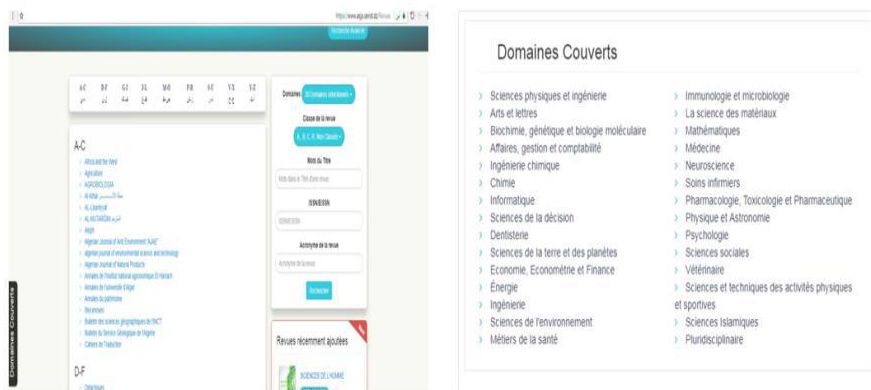


Figure 3: Journals’ Domains and their Order in ASJP

### 5.6. Drawbacks of ASJP

Nowadays, ASJP has become a necessity to keep up with technology based communication and scientific research in the world. Algeria was in need of SRJM Platforms to solve the conventional problems and deficiencies of scientific publication mainly to promote higher education and universities research. Thus, ASJP comes to respond to all those needs. Yet, novice researchers and PhD students still struggle with the platform claiming that they find some weaknesses within. ELHAMZA (2018) in his paper “ASJP: is it a mean of an open access and a real tool to eradicate bureaucracy and scientific nepotism or just an illusion and technological fashion!?” explained some weaknesses in ASJP:

- The big difference in the three versions of the platform, Arabic, French and English. The French version is more effective and useful than the others. Arabic and English seem to be incomplete; they lack some services.
- The use of thematic classification or order in the main interface is really a messy method and usually very confusing for visitors.
- Also the alphabetical order of journals is not appropriate it should not be mentioned in the main interface, especially that the number of journals is rapidly increasing, which make the main interface overloaded with data.
- The descriptive section of every journal differs from one journal to another and sometimes it’s incomplete and is not able to introduce the journal appropriately.
- Lack of precise and reliable research of key-words, authors’ names..... in the platform.

Moreover, based on my experience within the ASJP, as a researcher, I find that the reviewing time is very long and time consuming from 1 month to 1 year, sometimes until you forget your submission; maybe because of loads of submissions every day in one journal or due to the few number of reviewers in that journal .... Also, there is a need to consider the reasons behind any rejection of a submission; they are often non-convincing: "out of period of reception", "sorry, we do not accept any submission at the moment".....Another deficiency of the ASJP is that when your research paper is accepted you will surely have some minor revisions at the meantime neither the ASJP nor the journal will provide you with "Acceptance Certificate/Letter", thus just you have to wait till the date of publication, even if you want to submit your accepted paper in scientific committee for approval, you will not be able without acceptance letter.

According to many PhD Students, what is the most challenging hindrance in publishing in ASJP is journals' templates; there is no common or conventional template for ASJP papers, instead, every research journal has its own particular template that surely differs a lot from another journal's template. Henceforth, if you receive a rejection by X journal and you want to submit the same paper in another journal Y, you find it very challenging because once again you have to put it in another template which corresponds to Y journal only.

## **5. Conclusion**

The digital Platforms are used all over the world and researchers serve up to them to share and transmit research to their educational communities, making users and developers working collaboratively. The great success of these platforms was due to the fact that they are open source systems, providing scholars and researchers the opportunity to make new contributions and new publications. It seems to us that the integration of such platforms in Algeria deserves special attention.

Despite the newness of the ASJP and all the weaknesses, it was a significant step in scientific publication in Algeria. Today, it is able to provide researchers with a digital repository of thousands of scientific works that can be accessed by everyone without any restrictions in a short time since its inception. It could facilitate the publishing process and raises "interest" in technological oriented publication system, more specifically in the Platforms. Furthermore, this study ends up with the following recommendations:

- Raising awareness of the importance of digital platforms because of the recent information they provide for intellectual communities.
- Supporting and encouraging scholars and researchers to publish through platforms and avoid all problems of conventional publishing.
- Improving the ASJP problem of template, through unifying journals' templates and creating one common template particular to ASJP to facilitate papers submission process for many scholars.
- Increasing collaboration in reviewing by scholars of different journals in order to shorten the reviewing process period; reviewers can assist their mates on the reviewing process especially if they have many submissions to review.
- Exploiting all modern technological capabilities to serve research and scientific publication in Algerian Universities.
- Make research and scientific Publication a priority and among the basics on which national development is based.

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