

Democratizing Science

Regional Symposium on Open Science Implementation Pathways of the UNESCO Recommendation in the Arab Region

In homage to Fatima al-Fihrya, founder of the world's first university, "al-Quaraouiyine", in 859, in the scientific and cultural pole of Fez, Morocco.

Date	November 28-29, 2024
Venue	Mohammed V University, Rabat, Morocco
Modality	Hybrid

1/ Context of the Symposium

Efforts to democratize science originated in academia and gradually evolved into the recent United Nations Educational, Scientific and Cultural Organization (UNESCO) Recommendation on Open Science, triggered by the need to provide access to scientific information during the global COVID-19 crisis¹. The UNESCO Recommendation resulting from an inclusive, transparent and multi-stakeholder consultative process, was adopted at the 41st session of the UNESCO's General Conference, in November 2021. The Recommendation presents a common definition of Open Science, its fundamental values and guiding principles, as well as guidelines for priority areas of action.

Adopted by 193 countries, the UNESCO Recommendation on Open Science aims to provide an international framework for Open Access policies and practices, while recognizing disciplinary and regional differences in perspectives. The Recommendation's components also consider academic freedom, gender-transformative approaches, and the specific challenges faced by researchers and other Open Science actors in different countries, particularly in developing countries. In addition, the Recommendation aims to contribute to reducing the digital, technological, and cognitive divides between and within countries².

Open science in the Arab Region faces many challenges in terms of political, economic and socio-cultural practices. These challenges widen the gaps in science, technology, and innovation with other nations, and affect education, research, scientific production, health, and employment.

Arab member states took note of the preparation of this recommendation on Open Science during the Second Arab Forum on Open Access', which was organized through collaboration between the Arab Open Access Community (ACOA) and the Arab League Educational, Cultural and Scientific Organization (ALECSO). This forum was held online, in October 2021, and one of its outcomes was the 'Arab Manifesto for Open Science'.

The participants in this second forum endorsed a set of universally shared principles set out by UNESCO. They published a manifesto with seventeen recommendations, calling for the involvement of the Arab world in the Open Science movement, to guarantee a regional framework that can guide all stakeholders in the project of establishing the material and regulatory foundations of endogenous Open Science.

¹ Sanabria-Z.J., Cruz-Sandoval M., Moreno-Romo A., Bosch-Gómez S., Ramírez-Montoya M. S., 2024. Research foresight in bridging open science and open innovation: Overview based on the complex thinking paradigm, *International Journal of Innovation Studies* 8 (1): 59-75, <https://doi.org/10.1016/j.ijis.2023.08.002>

² UNESCO Recommendation on Open Science: <https://unesdoc.unesco.org/ark:/48223/pf0000381148>

The World Federation of Scientific Workers (WFSW), aware of the importance of the UNESCO Recommendation on Open Science as a tool to support the achievement of the Sustainable Development Goals (SDGs), to strengthen Science, Technology and Innovation, and to address the shortcomings that mar the tools and processes dedicated to scientific research and the circulation and use of its results in the Arab Region, calls on stakeholders to discuss during a regional symposium the pathways to Open Science, and the appropriate measures to benefit from scientific progress, in order to bridge the knowledge and technology gaps between Arab countries and with other countries around the world. The symposium will present the tools and processes dedicated to scientific research and the circulation and use of its results in the Arab Region. In addition, participants will be invited to hold dialogues on the benefits and challenges associated with Open Science, infrastructures, funding mechanisms, and specific legislation for its implementation.

In this context, the WFSW is co-organizing, in partnership with UNESCO, the Mohammed V University in Rabat, and decision-makers and players in scientific research and development, a regional symposium 'Democratizing Science', dedicated to discussing the 'Implementation pathways for the UNESCO Recommendation in the Arab Region'. A comparative overview at the experiences initiated in the regions which are undergoing change, notably in Africa and Latin America, will enable the participants to identify the dynamics at work in the development of different regions, and to better grasp their successes and pitfalls.

2/ Objectives of the Symposium

The symposium aims to achieve the following two key objectives:

1. Identify and discuss the issues and practices of Open Science in changing regional spaces;
2. Point out and map strategies and processes enabling countries in the Arab Region to benefit from progress made in addressing cognitive divides.

3/ Themes of the Symposium

The Symposium will focus on the universal scope of Open Science, its aims, guidelines and values, the infrastructure it requires, and its relevance to the Arab region. The themes will focus on the "where" and "how" of the following key elements:

1. Practical trends in Open Science around the world and in the countries of the Arab region: policy approaches, strategies, funding, and incentives ;
2. Infrastructures conducive to Open Science: federated technologies respecting the FAIR³ and CARE⁴ principles, and benefiting from networking, artificial intelligence, and their development, etc. ;
3. The development of free scientific publishing, geared towards the context of Open Science: channels, benefits and control of article processing costs, while limiting the commercial exploitation of data and predatory behavior, etc. ;
4. The choice of legislation specific to Open Science: opening and/or protecting rights, texts and legal procedures, and taking advantage of "Creative Commons"⁵ ;
5. Ensuring the availability of adequate human resources: training Open Science workers (teachers, information, and technology specialists, etc.), and promoting the role of women and young scientists to make the most of the recommendation.

4/ Participants in the Symposium

Stakeholders involved in the Symposium and in discussing the implementation of the UNESCO Open Science Recommendation will include:

1. Researchers - academics and their representative bodies and unions ;
2. Decision-makers and workers in science, technology and innovation ;
3. UNESCO Chairs and UNITWIN Networks ;
4. Representatives of regional groupings (League of Arab States, African Union, etc.) ;

³ FAIR: Easily Findable, Accessible, Interoperable and Reusable

⁴ CARE: Collective Benefit, Authority to Control, Responsibility, and Ethics

⁵ Creative Commons" are works that authors intend for common use and for which they grant all or part of the rights of use free of charge, under certain conditions

5. Non-governmental organizations and other partners (public and private) concerned with research issues and Open Science ;
6. Scientific editors ;
7. Library and information systems and services and their associations (IFLA, AFLI), etc.

5/ Languages of the Symposium

Arabic, English and French.

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