**Mecila:** 

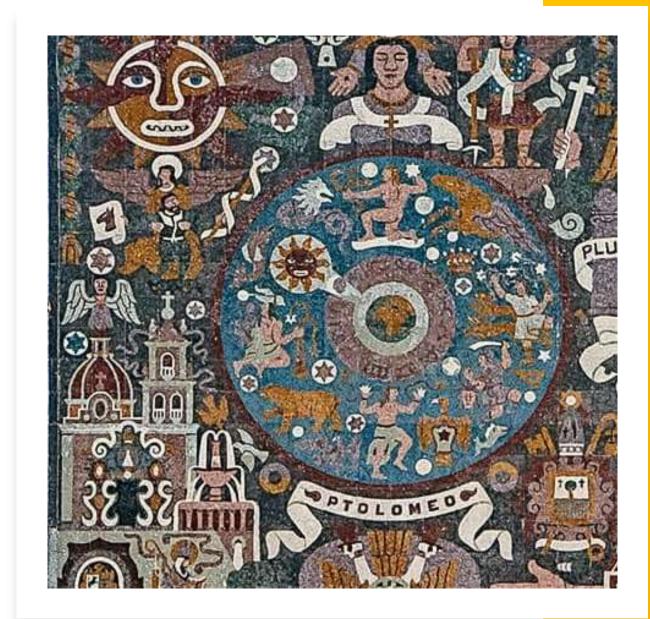


# Open access, open data and open science aligned with responsible research assessment: perspectives from Latin American and the Caribbean

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Latin America has created and maintains a non-commercial infrastructure where scientific publishing belongs to academic institutions and not to large publishers



#### Latin America: schorlar-led, publicly funded, non-profit, open access infrastructures



#### LATIN AMERICA

- **community owned and governed open access**: bibliodiversity + multilingualism
- region with highest % of open access adoption in scholarly journals published in the region, with no APCs and no outsourcing to commercial publishers
- university leadership of open access
- \* open access journal platforms (university and national -OJS + regional Latindex, Redalyc-AmeliCA, SciELO)
  - \* institutional repositories (La Referencia-COAR)
- national and institutional open access policies prioritize open access repositories for publications and data
- more recently, open science is promoted in the region
  - \* research data platforms (institutional, national)
  - \* co-production of knowledge with other societal actors

community governance contributes to equity, inclusion, bibliodiversity and

## KNOWLEDGE FOR THE PUBLIC GOOD

Who is using those articles published in peer-reviewed open access journals from regional indexing services?

Contribution to education, research, professional practice and citizens needs

Type of Reach	Approximate Proportion			
	SciELO	RedALyC		
Students	50%	55%	1	
University Staff	25%	22%	}	academic
Professional Practice	20%	17%	1	public
Personal Use	9%	6%	5	Public

<sup>&</sup>quot;This table represents a composite of the results derived from my interpretations of all the responses and data collected in my dissertation study. As such, the numbers should be treated only as approximations, and the percentages should not be expected to add to 100%.

@juancommander

Open science and open access policies – Report (2020, in Spanish)

The topic of open research data is present in the national Open Access legislation approved in Peru (2013), Argentina (2013), Mexico (2014), Colombia (2022), and in discussions (eg. Chile, Argentina, Brazil).



#### Research data in repositories

- National/State research data repositories
  - National systems of institutional repositories in 11 countries of LAC, with incipient collections of datasets, as reflected in La Referencia
  - Eg. of National data repositories: National Systems of Data Repositories in Argentina (biological, genomic, sea data)
  - Eg. of State data repository: Rede de Repositórios de Dados Científicos do Estado de São Paulo, Brazil),
- Data repositories
  - Eg.: Dataverse used in 18 data repositories in Latin America
- Subject data repositories, integrated to international subject repositories, eg.:
  - SiBBr-GBIF: The Brazilian Biodiversity Information System, member of the Global Biodiversity Information Facility

# Eg. of present challenges in research data management, and need of collaboration and international cooperation

- Open science brings bibiodiversity and datadiversity.
- The cost implicated in reliable and sustainable infrastructures. Eg: servers with more capacity, strong connectivity, more expensive backup mechanisms. New functionalities and value added services needed in repositories, or the cost of developing research data repositories
- Scarce resources to develop/adapt institutional repositories for diverse research outputs, eg. Publications, data, preprints, multimedia, each with its particular requirements.
- Train users/trainers at the national and institutional level, eg.: La Referencia/RDA, ECLAC/LEARN (LERU), CODATA
- Promote FAIR and CARE principles
- Research data working groups to share experiences and resources
- Awareness and training activities for researchers and repositories staff (cultural change)
- Specific funding
- Specific programs for social sciences research data resulting from co-creation of knowledge with societal actors other than academics (methodologies and data management)

# Eg. of concerns in relation to research data management

- **Costs** of research data management, training, new functionalities needed in repositories for data and preprints, cost of identifiers
- Extractivism of data the commodification of interactions and contents hidden work in participation in international open science programs.
- Who provides data for collaborative research and participates in the project's design and management?
- Issues of diversity and inclusiveness in contents, management of research data, and decisions about technologies and methodologies to be used to reduce inequities.



THE BUDAPEST OPEN ACCESS
INITIATIVE 20TH ANNIVERSARY
RECOMMENDATIONS

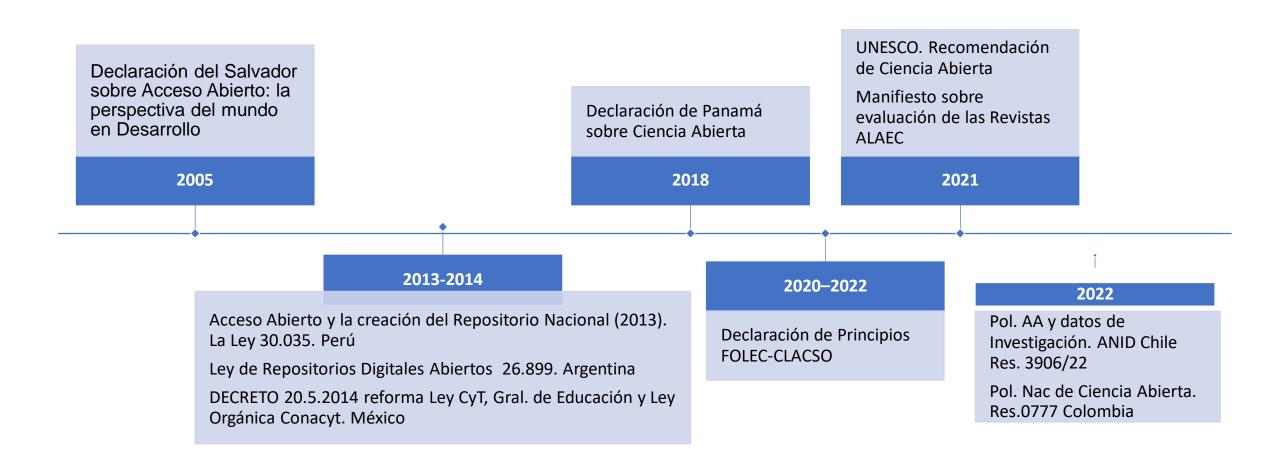


#### **RECOMMENDATION 1:**

Host OA research on open infrastructure. Host and publish OA texts, data, metadata, code, and other digital research outputs on open, community-controlled infrastructure. Use infrastructure that minimizes the risk of future access restrictions or control by commercial organizations. Where open infrastructure is not yet adequate for current needs, develop it further.

# Aligning RRA with Open Science

### Regional landscape



# MOTIVATIONS FOR CHANGE IN RA



Research assessment



Fragmentation of RA systems.

Systemic distortions in evaluation systems: quantitative and hegemonic-universal bias on contextual elements.

Increasing influence of publishing models outside of Latin America. Biggest pressure from funding agencies and national science councils whose research assessment practices are often guided by international mainstream metrics, such as JIF.

Tradition of regional journals and indicators: little value in evaluation systems. A wide range of local knowledge production and participatory science unseen in RA criteria. A wide range of local knowledge production and participatory science unseen in RA oriteria.

Limit local autonomy of research agendas, discourage good open access practices, and research in interaction with society.

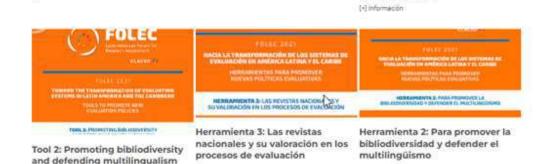
Underfunding of community-owned infrastructures because scarce funds directed to APCs.

Weak information system and interoperability of infrastructures.



### ACTIONS FOR CHANGE IN RA: FOLEC INITIATIVE

- Mobilization actions, diagnosis & proposals on RA.
- ✓ Series of advocacy papers & RA policy tools on: Current information systems, Multilingualism and bibliodiversity; Promotion of national journals.
- ✓ Regional Consultation on Peer-Review.
- ✓ Research on mission-oriented research proposals & innovative forms RA.
- ✓ Declaration of principles.



TOWARDS A TRANSFORMATION OF SCIENTIFIC RESEARCH ASSESSMENT IN LATIN AMERICA AND THE CARIBBEAN

> Evaluating Scientific Research Assessment

Evaluating Scientific Research Assessment

[+] Información

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TOWARDS A TRANSFORMATION OF SCIENTIFIC RESEARCH ASSESSMENT IN LATIN AMERICA AND THE CARIBBEAN

> Diagnosis and Proposets for a Regional Initiative'

Diagnosis and Proposals for a Regional Initiative

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Herramienta 1: Los sistemas CRIS, su potencialidad para visibilizar diversas formas de producción de conocimiento e impulsar nuevas modalidades de evaluación

El Fore Latinoamericano de Evaluación Certofica (FOLEC) de CLACSO lanza la risulva serir de documentos "HAICIA LA TRANSPORMACIÓN DE LA EVALUACIÓN DE LA CIENCIA EN AMÉRICA LATINA Y EL CAMBE.

# DECLARATION OF PRINCIPLES

A NEW RESEARCH
ASSESSMENT TOWARDS A
SOCIALLY RELEVANT
SCIENCE IN LATIN AMERICA
AND THE CARIBBEAN





#### Assessment must ensure socially relevant science

Valuation of open science and qualitative research assessment

Weighting of teamwork

The scientific community's participation on evaluation processes and indicators

Use of regional, national and international indexing indicators for quality journals

Impact should include the social relevance of knowledge

Recognition of knowledge contribution by extra-academic stakeholders

Multilingualism and cultural diversity.

Evolutionary, participatory and transparent assessment

Recognition of peer review

Representation of women and diversities in assessment processes and research topics

More inclusive assessment processes for ECR

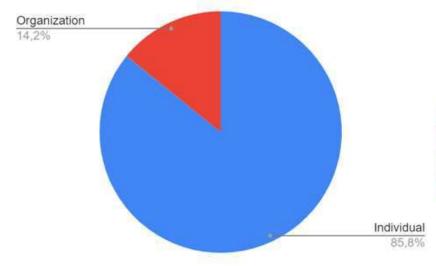
**Information systems** should reflect **comprehensive trajectories**, respecting diversity.

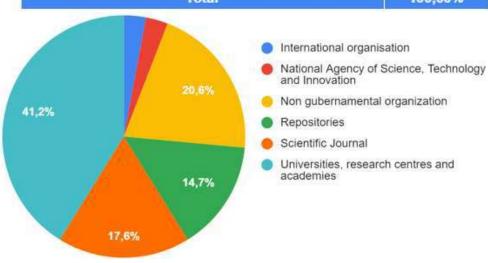
**Citation indicators** limited in **geographic, disciplinary or linguistic** scope are not valid for comparisons.

# SUPPORTERS OF THE DECLARATION (FIRST WEEKS)

Signing type	
Individual	188
Organization	31
Total	219







#### Recommendations



Transition toward more comprehensive evaluation and funding of research (portfolio)

Diversify methodologies for evaluating scientific production and circulation.

.Hierarchize publication in journals indexed in international/regional/national databases in OA modalities without APCs and consider open evaluation processes. Encourage data sharing, reward availability of open data and provisional results in open platforms and FAIR principles; open source software and creation of other tools open to users. Regulate self-archiving in OA repositories and under CC.





Recognize and value active participation of citizens and users in research processes. Team science, inclusive and equitable, recognition of diverse contributions and interdisciplinarity.

### Monitoring: Experiences, areas and data

- National level: initial and experimental stage
   Advisory Committees for OS
- FOLEC survey on RRA initiates and practices in LAC aligned with OS to be launched, oriented to OA journal editors, universities, research centers and STI institutions.



# What is needed for open, participatory and collaborative research ASSESSMENT IN LAC?



Transition to more comprehensive research assessment and funding.



Incremental changes that harmonize and coordinate policies and methodologies toward shared principles of RRA and OS.



Diversity of research assessment approaches, in dialogue with existing STI trajectories and instruments.



New methodologies & data for better assessing inter/multi/transdisciplinary science, environmental and local issues.



Shared, interoperable, sustainable, federated infrastructures that support bibliodiversity and multilingualism.



Participatory and bottom-up designs, broaden participation of citizens & society and research groups underrepresented. Science as human right: collective benefit

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